U.S. Department of the Interior
Bureau of Land Management
White River Field Office
220 E Market St
Meeker, CO 81641

ENVIRONMENTAL ASSESSMENT

NUMBER: DOI-BLM-CO-110-2010-0055-EA

CASEFILE/PROJECT NUMBER: 0501452

PROJECT NAME: Grazing Permit Renewal Cathedral Bluffs Allotment (06349)

LEGAL DESCRIPTION:

Cathedral Bluffs Allotment (06349) Legal Description			
Township	Range	Sections	Portions of Sections
1N	101W	29,32-35	5-8,16-21,26-28,30,31,36
1S	101W	2-5,8-11,14-17,21-28,34-36	1,7,12,13,18-20,29,33
1S	100W	30,31	18,19,29,32
2S	101W	1-3,10-15,22-26	4,9,16,21,27,35,36
2S	100W	6-8,17-20,29-33	4,5,9,16,21,27,28,34
3S	101W		1,36
3S	100W	3-5,9,10,15,16,21-23,25-29,32-36	2,6-8,11-14,17,20,24,30,31
3S	99W	30	19,20,29,31,32
4S	101W	24,25,35,36	1,11-14,23,26,34
4S	100W	1-9,16-20,29,30	10-15,21,28,31-34
4S	99W		5-8
5S	101W	1,2,11-14,23	3,10,15,16,20-22,24,28,29
5S	100W		4-10,14-18,20-23,25,26
5S	99W		30-32

APPLICANT: Nona Powell

ISSUES AND CONCERNS (optional):

DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVES:

Background/Introduction: Powell 4-A ranch manages a cow/calf livestock operation within the Cathedral Bluffs allotment (06349) totaling 106,578 acres (88,778 BLM acres). General location of the allotment is west of the Cathedral Bluffs, and south-east of Rangely, Colorado. Grazing preference was recently transferred to Nona Powell of Powell 4A Ranch and a grazing application has been submitted.

The northern boundary of the Cathedral Bluffs allotment is along Highway 64, beginning approximately one mile west of the town of Rangely, continuing for one mile along the highway before turning south. The western allotment boundary begins at the junction of State Highways 64 and 139, this boundary continues south approximately 17 mile along Highway 139 to county road 27, where it follows county road 27 south to Pike Ridge. The general southern boundary is the Book Cliff divide. The eastern boundary generally follows the Cathedral Bluffs, and Big Ridge. All boundaries are fenced, or utilize topographic barriers to contain livestock. Elevation on the allotment ranges from 5,300 to 8,800 feet.

This allotment consists of eight pastures: Hogan, Willow Creek, Bear Canyon, Burma Road, Cathedral Creek, Tommy's Draw, Wardell (private), and Powell 4-A. The BLM and the Permittee first developed an Allotment Management Plan (AMP) for the Cathedral Bluffs allotment in 1986, and revised it in 1994 and 1999. The BLM completed the last revision of the AMP in December 2000, after incorporating the Cathedral Creek allotment into the current allotment. Following incorporation of the Cathedral Creek allotment into the Cathedral Bluffs AMP, cattle numbers were increased by 50 head; however yearling cattle numbers remained the same resulting in a total increase of 76 AUMs.

Approximately 83 percent of the acreage on the allotment is federal range. Table 1 below is an acreage breakdown by pasture of land status for the Cathedral Bluffs allotment.

Table 1:

Land Status by Pasture Cathedral Bluffs Allotment (06349)				
	Acres			
Pasture	BLM	Private	State	Total
Hogan	31176	75	0	31251
Willow Creek	4292	1714	3	6009
Bear Canyon	9531	2088	0	11619
Burma Road	7000	2574	0	9574
Cathedral Creek	10146	2280	71	12497
Tommy's Draw	24671	3640	0	28311
Wardell	0	2136	2	2138
Powell 4A	1961	3218	0	5180
Total	88778	17725	75	106578

Grazing allotments within the Bureau of Land Management (BLM) White River Field Office (WRFO) have been placed in one of three management categories that define the intensity of management: Improve (I), Custodial (C) and Maintain (M). These categories broadly define rangeland management objectives in response to an analysis of an allotment's resource characteristics, potential, opportunities, and needs. Allotment categorization for the Cathedral Bluffs allotment is "Improve".

Proposed Action: The Proposed Action is issuance of a grazing permit to Nona Powell, authorizing livestock grazing on the Cathedral Bluffs allotment (06349). Renewal is for a ten year period as outlined in Table 2 below and follows the current grazing schedule. This grazing schedule would be incorporated into the grazing permit and functioning as the Allotment

Management Plan (AMP). A Term and Condition of the permit would require the permittee to follow the prescribed grazing schedules and operate within the limits of flexibility as outlined in this Environmental Assessment (EA). Objectives of the Cathedral Bluffs allotment management plan are:

- To maintain or enhance a healthy rangeland vegetation composition and species diversity, capable of supplying forage at a sustained yield to meet the current forage demands for livestock and wildlife.

- To provide for adequate forage plant growth and or re-growth opportunities necessary to: 1) replenish plants' food reserves; and 2) produce sufficient seed to meet the reproduction needs necessary to maintain an ecological presence in the plant community.

- To establish livestock grazing strategy where the permittee can use this allotment to graze the range at a level that provides for plant growth requirements and provides for the most economical use of all forage resources available to the ranch operation.

Table 2:

Cathedra Bluffs Grazing Permit 0501452						
	Livestock		Grazing Period			
PASTURE	NUMBER	KIND	BEGIN	END	%PL	AUM's[1]
Hogan Draw	550	Cattle	3/1	3/31	100%	561
Tommy's Draw	550	Cattle	4/1	4/30	93%	504
Tommy's Draw	50	Cattle	5/1	5/31	93%	47
Willow Creek	350	Cattle	5/1	5/31	45%	161
Willow Creek	200	Cattle	6/1	6/15	45%	44
Cathedral Creek	150	Cattle	5/1	6/15	82%	186
Burma Road	100	Cattle	5/1	5/31	56%	57
Burma Road	200	Cattle	6/1	6/15	56%	55
Burma Road	550	Cattle	6/16	6/30	56%	152
Powell 4-A	550	Cattle	7/1	8/30	35%	386
Powell 4-A	400	Cattle	9/1	9/30	35%	138
Bear Canyon	150	Cattle	9/1	9/30	41%	61
Burma Road	200	Cattle	10/1	10/30	56%	110
Bear Canyon	350	Cattle	10/1	10/30	41%	146
Burma Road	100	Cattle	11/1	11/15	56%	28
Bear Canyon	400	Cattle	11/1	11/15	41%	81
Cathedral Creek	50	Cattle	11/1	11/30	82%	40
Tommy's Draw	100	Cattle	11/15	11/30	93%	49
Willow Creek	250	Cattle	11/15	11/30	45%	59
Hogan Draw	250	Cattle	12/1	12/30	100%	247
Tommy's Draw	250	Cattle	12/1	12/30	93%	229
Cathedral Creek	50	Cattle	12/1	12/30	82%	40
Hogan Draw	550	Cattle	1/1	2/28	100%	1067
Willow Creek	200	Yearling Cattle	6/1	6/30	45%	89
Burma Road	200	Yearling Cattle	6/1	6/30	56%	110

Bear Canyon	400	Yearling Cattle	9/1	10/31	41%	329
Willow Creek	200	Yearling Cattle	11/1	11/30	45%	89
Burma Road	200	Yearling Cattle	11/1	11/30	56%	110
					Total	5175

[1]Animal Unit Months

Limits of Flexibility: The permittee would be allowed flexibility from the submitted plan of operation during the grazing year that does not require prior approval from the BLM. This flexibility would be limited to on or off dates and number of animals to adjust to changing climatic conditions, forage variability, and operational needs. Flexibility of the on or off dates would be limited to 10 days either way provided total days of use does not exceed 10 days from the schedule approved in the allotment management plan. However, livestock may not be turned in to spring pastures early unless pre-approved by the BLM. The permittee would also be able to adjust the number of animals by (+/-) 10 percent provided the total AUMs of use do not exceed the AUMs scheduled. The BLM will account for these flexibilities once the permittee has submitted Actual Use forms.

Flexibilities that require approval by the BLM are adjustments made beyond the above criteria. BLM approved flexibilities and/or changes to this plan may be required due to such factors as forage influences from grazing, drought, fire, and/or water availability. The BLM, in conjunction with the grazing permittee, may also adjust this AMP if a situation develops in order to meet the Standards for Public Land Health.

Rangeland Improvements Necessary to Implement the Grazing System: No rangeland improvements (RI) are proposed to implement the grazing system. Future evaluations of allotment conditions may identify improvements that would aid in achieving objectives. In which case, a separate Environmental Assessment (EA) would be compiled to approve any such new RI on a site specific basis.

Monitoring and Evaluation: The BLM has established 17 long term trend sites within the Cathedral Bluffs allotment. Trend sites include a permanent, repeatable photo plot and a permanent, repeatable Daubenmire transect line to measure canopy coverage and species frequency. The BLM established study sites in key areas to monitor livestock grazing use, in accordance with protocol developed in the *Grazing Allotment Monitoring Plan for the White River Resource Area*. The BLM reads trend study plots every five years. Future readings of trend studies by BLM staff are partially dependent upon future workload capabilities and priorities. Other monitoring within the allotment includes utilization monitoring using the key forage plant method, and actual grazing use submitted by the permittee twice a year which reflects the total amount of AUMs used during the grazing year.

Grazing Permit Terms and Conditions: The following terms and conditions as required by 43 CFR 4130.3 would be included in the grazing permit issued under this alternative:

1. The permittee or lessee must provide reasonable administrative access across private and leased lands to the BLM for the orderly management and protection of the public lands, as outlined 43 CFR 4130.3-2(h).

2. It is unlawful for the permittee, agents or employees to knowingly disturb or collect cultural, historical or paleontological materials on public lands. If cultural, historical or paleontological materials are found, including human remains, funerary items or objects of cultural patrimony, the permittee is to stop activities that might disturb such materials, and notify the authorized officer immediately.

3. No grazing use can be authorized under this grazing permit/lease during any period of delinquency in the payment of amounts due in settlement for unauthorized grazing use.

4. Grazing use authorized under this grazing permit/lease may be suspended, in whole or in part, for violation by the permittee/lessee of any of the provisions of the rules or regulations now or hereafter approved by the Secretary of the Interior.

5. This grazing permit/lease is subject to cancellation, in whole or in part, at any time because of:
    a. Noncompliance by the permittee/lessee with rules and regulations now or hereafter approved by the Secretary of the Interior.
    b. Loss of control by the permittee/lessee of all or a part of the property upon which it is based.
    c. A transfer of grazing preference by the permittee/lessee to another party.
    d. A decrease in the lands administered by the Bureau of Land Management within the allotment(s) described herein.
    e. Repeated willful unauthorized grazing use

6. This grazing permit/lease is subject to the provisions of executive Order No. 11246 of September 24, 1965, as amended, which sets forth nondiscrimination clauses. A copy of this order may be obtained from the authorized officer.

7. The permittee/lessee must own or control and be responsible for the management of the livestock authorized to graze under this grazing permit/lease.

8. The authorized officer may require counting and/or additional/special marking or tagging of the livestock authorized to graze under this grazing permit/lease.

9. The permittee's/lessee's grazing case file is available for public inspection as required by the Freedom of Information Act.

10. In order to improve livestock distribution on the public lands, no salt blocks and/or mineral supplements will be placed within a 1/4 mile of any riparian area, wet meadow, or watering facility (either permanent or temporary) unless stipulated though a written agreement or decision in accordance with 43 CFR 4130.3-2(c).

11. In accordance with 43 CFR 4130.8-1(F): Failure to pay grazing bills within 15 days of the due date specified in the bill shall result in a late fee assessment. Payment made later than 15 days after the due date, shall include the appropriate late fee assessment. Failure to make

payment within 30 days may be a violation of 43 CFR Sec. 4140.1(b) (1) and shall result in action by the authorized officer under 43 CFR Secs. 4150.1 and 4160.1-2 (Trespass).

These terms and conditions are in conformance with 43 CFR 4100.0-2, 4130.3, 4130.3-1, 4130.3-2 and 4130.3-3.

Alternative B (No Grazing Alternative): The grazing permit would not be renewed and there would be no livestock grazing on public lands within the Cathedral Bluffs allotment where it is currently permitted. This alternative would not be in compliance with the White River ROD/RMP decision to provide for livestock grazing as one of the acceptable multiple uses.

ALTERNATIVES CONSIDERED BUT NOT CARRIED FORWARD: None

NEED FOR THE ACTION: The purpose of the Proposed Action is to manage multiple uses on Public Lands in a manner that avoids, minimizes, reduces, or mitigates potential impacts to other resource values. The previous grazing permit for the Cathedral Bluffs allotment expired on February 28, 2010. Because the BLM had not fully processed the renewal of this permit as required by NEPA, the permit was issued in accordance with public law 11-290, an extension of public law 11-243 Continuing Appropriations Act, 2011, and contains the same terms and conditions of the expired permit. Fully analyzing this renewal of this grazing permit under NEPA will allow BLM to add or delete terms and conditions of the grazing permit as necessary. The permit is subject to renewal or transfer at the discretion of the Secretary of the Interior for a period of up to 10 years. The BLM has the authority to renew the livestock grazing permit/lease consistent with the provision of the *Taylor Grazing Act, Public Rangelands Improvement Act, Federal Land Policy and Management Act, and the White River Resource Area Resource Management Plan* (WRRMP*)*. The WRRMP incorporates the Colorado Standards for Public Land Health and Guidelines for Livestock Grazing. In order to graze livestock on public land, the livestock permittee must hold a valid grazing permit. The grazing permittee has a preference right to receive the permit if grazing is to continue. The White River Record of Decision and Approved Resource Management Plan allows for grazing to continue on this allotment.

PLAN CONFORMANCE REVIEW: The Proposed Action is subject to and has been reviewed for conformance with the following plan (43 CFR 1610.5, BLM 1617.3):

Name of Plan: White River Record of Decision and Approved Resource Management Plan (ROD/RMP).

Date Approved: July 1, 1997

Decision Number/Page: Pages 2-22 through 2-26

Decision Language: With minor exceptions, livestock grazing will be managed as described in the 1981 Rangeland Program Summary (RPS). That document is the Record of Decision for the 1981 White River Grazing Management Final Environmental Impact Statement (Grazing EIS).

AFFECTED ENVIRONMENT / ENVIRONMENTAL CONSEQUENCES / MITIGATION MEASURES

STANDARDS FOR PUBLIC LAND HEALTH: In January 1997, BLM approved the Standards for Public Land Health. These standards cover upland soils, riparian systems, plant and animal communities, threatened and endangered species, and water quality. Standards describe conditions needed to sustain public land health and relate to all uses of the public lands. Because a standard exists for these five categories, the BLM must make a finding must for each of them in an environmental analysis. These findings are located in specific elements listed below:

Table 3 below provides a comparison of findings and expected findings by alternative of acreages/miles currently meeting and not meeting or expected to meet or not meet each standard. The Current Situation column analyzes conditions based on AUMs and season of use in the grazing permit that has been in effect on the allotment for the past ten years. Alternative B analyzes expected outcomes of a removal of livestock grazing from the allotment.

The BLM based these findings, by resource, on a variety of methods including but not limited to Land Health Assessments, utilization studies, long term trend monitoring studies and Proper Functioning Condition assessments and are listed by specific elements in the table below. Each element is discussed in detail in the appropriate sections appearing later in the document.

Table 3

STANDARDS FOR PUBLIC LAND HEALTH							
	Current Situation in Acres			With Proposed Action in Acres		With No Grazing in Acres	
Standard	Achieving or Moving Towards Achieving	Not Achieving	Causative Factors	Achieving or Moving Towards Achieving	Not Achieving	Achieving or Moving Towards Achieving	Not Achieving
#1-Upland Soils	39,929	101	Historic Spring Grazing/ Cheatgrass	39,929	101	39,929	101
#2-Riparian Systems (Miles)	55.13	0	N/A	55.13	0	55.13	0
#3-Plant Communities	39,929	101	Historic Spring Grazing/ Cheatgrass	39,929	101	39,929	101
#3-Animal Communities	39,929	101	Historic Spring Grazing/	39,929	101	39,929	101
#4-Special Status, T&E Species	39,929	101	Historic Spring Grazing/ Cheatgrass	39,929	101	39,929	101

STANDARDS FOR PUBLIC LAND HEALTH							
#5-Water Quality (stream miles)	5,175[1]	0	N/A	5,175	0	5,175	0

NATURAL, BIOLOGICAL, AND CULTURAL RESOURCES

AIR QUALITY

Affected Environment: This Proposed Action would authorize livestock grazing in the Cathedral Bluffs allotment located in rural northwest Colorado in the White River Basin. Industrial facilities in White River Basin include coal mines, soda ash mines, natural gas processing plants and power plants. Due to these industrial uses, increased population and oil and gas development in this region, emissions of air pollutants in the White River Basin due to exhaust emissions and dust (particulate matter) are likely to increase into the future. Despite increases in emissions, overall air quality conditions in the White River Basin are likely to continue to be good for some time due to effective atmospheric dispersion conditions and limited transport of air pollutants from outside the area. The Proposed Action is not located within a 10-mile radius of any special designation airsheds or non-attainment areas. Such designated areas may require special consideration from the air quality regulatory agencies of Colorado Department of Public Health and Environment (CDPHE) and the U.S. Environmental Protection Agency (EPA).

Environmental Consequences of Alternative A: The environmental consequences to air quality from Alternative A would include the periodic and local production of dust due to cattle trailing to and from forage and water sources and when moving cattle to new pastures. Dust levels may be noticeable locally and especially during drier times. The Colorado Air Pollution Control Division (APCD) estimates the maximum PM_{10} levels (24-hour average) in rural portions of western Colorado to be near 50 micrograms per cubic meter ($\mu g/m^3$). This alternative is not likely to exceed this western Colorado dust standard.

Environmental Consequences of Alternative B, No Grazing Alternative: Impacts from the no-action alternative would result in no dust production due to grazing activities.

Mitigation: None Identified.

SOILS (includes a finding on Standard 1)

Affected Environment: Included in Table 4 below is a breakdown of soil units and associated ecological sites within the Cathedral Bluffs allotment. The BLM used the Rio Blanco and Douglas Pass soil surveys for the analysis of effects on soils within the project area. The soil surveys delineate individual soil unit polygons and associated ecological site.

[1] East Douglas is on Colorado's Monitoring and Evaluation List for total recoverable iron, but there are no stream reaches or water bodies on the section 303(d) of the Clean Water Act which would be result in not meeting standards for water quality see the water quality section for more information.

Table 4:

Cathedral Bluffs Allotment (06349) Soil Survey Summary - BLM Lands		
Soil Unit	**Ecological Site**	**Acres**
Rentsac-Moyerson-RockOutcrop,complex,5-65%slps	PJ Woodlands/Clayey Slopes	33788.7
Nihill channery sandy loam,5-50%slopes	Saltdesert Breaks	78.0
Turley fine sandy loam,3-8%slopes	Alkaline Slopes	74.1
Uffens loam,0-5%slopes	Alkaline Slopes	148.0
Cliffdown-Cliffdown Variant complex,5-65%slopes	Saltdesert Breaks	107.8
Torrifluvents, gullied	None	598.3
Kinnear fine sandy loam,1-5%slopes	Loamy Saltdesert	32.9
Turley fine sandy loam,0-3%slopes	Alkaline Slopes	114.3
Badland	None	152.6
Torriorthents-RockOutcrop, complex,15-90%slopes	Stoney Foothills	13846.0
Rock Outcrop	None	3629.2
Blazon, moist-Rentsac Complex,6-65%slopes	Pinyon-Juniper woodland	9013.7
Moyerson stony clay loam,15-65%slopes	Clayey Slopes	2864.6
Redcreek-Rentsac complex,5-30%slopes	PJ woodlands/PJ woodlands	565.5
Abor Clay Loam,5-30%slopes	Clayey Foothills	905.6
Bulkley channery silty clay loam,5-30%sclopes	Pinyon-Juniper woodlands	1295.4
Rentsac channery loam,5-50%slopes	Pinyon Juniper woodlands	174.6
Piceance fine sandy loam,5-15%slopes	Rolling Loam	120.0
Havre loam,0-4%slopes	Foothill Swale	1305.8
Glendive fine sandy loam	Foothills Swale	193.5
Tisworth fine sandy loam,0-5%slopes	Alkaline Slopes	1671.6
Starman-Vandamore complex,5-40%slopes	Dry Exposure/Dry Exposure	383.7
Work Loam, 8-15%slope	Deep Loam	35.7
Irigul channery loam,5-50%slopes	Loamy Slopes	976.0
Silas loam,0-8%slopes	Mountain Swale	4.0
Parachute Loam,25-75%sloeps	Brushy Loam	499.4
Parachute-Rhone loams,5-30%slopes	Mountain Loam	690.6
Kobar silty clay loam,8-15%slopes	Deep Clay Loam	128.6
Razorba channery sandy loam,30-75%slopes	Spruce-Fir woodland	2114.6
Northwater loam,5-50%slopes	Aspen Woodlands	137.2
Patent loam,3-8%slopes	Rolling Loam	229.5
Blakabin-Rhone-Waybe complex,5-50%slopes	Brushy Loam/Brushy Loam/Dry Exposure	3360.8
Kobar silty clay cloam,3-8%slopes	Deep Clay Loam	11.1
Patent loam,8-15%slopes	Rolling Loam	195.5
Veatch channery loam,12-50%slopes	Loamy Slopes	443.7
Dollard silty clay loam,15-40%slopes	Clayey Foothills	33.1
Irigul-Parachute complex,5-30%slopes	Loamy Slopes/Mountain Loam	600.0
Kobar silty clay loam,0-3%slopes	Deep Clay Loam	36.7
Rhone loam,30-75%slopes	Brushy Loam	321.5
Absher loam,3-8%slopes	Alkaline Slopes	2.2
Caballo very channery loam,40-80%slopes	Douglas-Fir woodlands	2637.8
HesperusEmpedrado,moistPagoda complex,35-55%slps	Brushy Loam/Brushy Loam	470.7
Silas loam,1-12%slopes	Mountain Swale	25.0
Torriorthents, cool-Rock outcrop complex,35-90%slp	None	141.3
Parachute-Irigul complex,5-30%slopes	Mountain Loam/Loamy Slopes	276.4

Cathedral Bluffs Allotment (06349) Soil Survey Summary - BLM Lands		
Soil Unit	**Ecological Site**	**Acres**
Parachute-Irigul-Rhone assoc,25-50%slopes	BrushyLoam/BrushyLoam/LoamySlopes	430.7
Hesperus-Empedrado,moistPagoda complex,5-35%slps	Brushy Loam/Brushy Loam	822.0
Cryorthents-Rock outcrop,50-90%slopes	Douglas-Fir woodland	960.3
Tosca channery loam,25-80%slopes	Brushy Loam	365.1
Northwater-Adel complex,5-50%slopes	Quaking Aspen	82.7
Northwater-Adel complex 5-25% slopes	Quaking Aspen	464.43
Parachute-Irigul complex 5-30% slopes	mountain loam/Loamy slopes	753.75
Parachute-Irigul-Rhone association 25-50% slopes	Brushy Loam	196.35
Northwater-Adel complex 5-25%slopes	Quaking Aspen	18.81
Cryothents-Rock outcrop complex 50-90% Slopes	Douglas Fir woodlands	27.87
Utso-Rock outcrop complex 40-90% slopes	Douglas Fir woodlands	150.29
Caballo very channery loam, 40-80% slopes	Douglas Fir woodlands	7.00
	Total	88714.6

Soils that are occupied with plant communities rated as mid seral, late seral or desired natural community (PNC) have sufficient canopy cover, and diversity of desirable plant species to produce adequate litter and ground cover to minimize runoff and provide for soil protection (refer to the Vegetation section below for ratings). These soils are meeting the Colorado Public Land Health Standards for upland soils. In the Cathedral Bluffs allotment, 39,929 of 40,030 classified BLM acres are meeting standards.

Soils that have sites rated as early seral plant communities are not meeting Public Land Health Standards, do not have sufficient diversity and/or cover of native plant species to provide effective ground cover to prevent overland flow, runoff, and general soil degradation. These soils are experiencing a certain degree of pedestaling, minor expression of rills, and some areas have active gully erosion. On the Cathedral Bluffs allotment, 101 public land acres were classified as early seral and are therefore not meeting land health standards. The early seral sites not meeting health standards have soils that are typically found within areas with a dominant population of cheatgrass (*Bromus tectorum)* an invasive annual grass that is unable to provide adequate soil protection.

Environmental Consequences of Alternative A (Proposed Action): Current livestock management on the Cathedral Bluffs allotment provides critical growing season rest and regrowth opportunity. Surface litter, canopy cover and ground cover would increase on most of the mid-seral and some of the early-seral rangelands as a result of the critical growing season rest and regrowth opportunities provided by livestock management under the Proposed Action. The BLM expects rest and regrowth opportunities to increase the cover of native perennial grass species important in soil protection. On the soils occupied by late seral and desirable natural communities, cover of perennial vegetation is not expected to change from the current situation. The soils with mid-seral, late seral and desirable natural community, as well as, those early seral communities experiencing increases in perennial vegetation cover would meet the Colorado Standard for upland soils.

Environmental Consequences of Alternative B (No Grazing Alternative): Under a no grazing scenario most of the sites currently being grazed by cattle in the Cathedral Bluffs

allotment would experience an increase in soil surface litter and an increase in perennial vegetation cover in the short term. This increase would be beneficial for soil protection and development. Such an increase in perennial vegetation cover would most likely occur on ecological sites rated as mid seral as well as some early seral ecological sites. Early seral ecological sites that are dominated by cheatgrass and that have crossed a transitional threshold would not be expected to increase in perennial plant cover. On most late seral and DNC ecological sites, vegetation cover and thus, soils would not be expected to change appreciably from the current situation. Under the no grazing alternative, with the exception of the early seral ecological sites, the Colorado Standard for upland soils would be met.

Mitigation: Continue monitoring key areas and add additional Daubenmire canopy coverage transects to identify trends and changes in plant community cover and composition

Finding on the Public Land Health Standard for upland soils: Soils that occupy early seral communities are mostly not meeting the Standards due to the lack of soil protection caused from a significant composition of cheatgrass, an invasive annual grass. All other seral communities (Mid – DNC) are currently meeting standards and make up the bulk of acres on the allotment. Implementation of the Proposed Action will enhance the ability of the rangelands to meet and continue to meet Public Land Health Standards.

WASTES, HAZARDOUS OR SOLID

Affected Environment: There are no known hazardous wastes on the subject lands. No hazardous materials are known to have been stored or disposed of and there are no known solid waste dump sites in the allotment. Much of the area has been developed for natural gas and there are many regional pipelines that travel near or through the allotment.

Environmental Consequences of the Proposed Action (Proposed Action): No listed or extremely hazardous materials are proposed for use in the Proposed Action. All applications of pesticides would be in compliance with BLM requirements and allowed under a separate authorization.

Environmental Consequences of the No Grazing Alternative: No hazardous or other solid wastes would be generated under the no-action alternative.

Mitigation: Please contact the BLM – WRFO Hazardous Materials Coordinator at (970) 878-3800 and/or the Colorado Department of Public Health and Environment (CDPHE) through the 24-hour spill reporting line at 1(877)518-5608, if the permittee suspects the release of any chemical, oil, solid waste, petroleum product, or sewage within the allotment.

WATER QUALITY, SURFACE AND GROUND (includes a finding on Standard 5)

Affected Environment: This allotment is within the Douglas Creek watershed and is tributary to the White River. Douglas Creek is perennial but is dominated by summer and late

summer thunderstorms and this allotment includes some perennial streams in the headwaters including the East Fork of Douglas Creek that is fed by Cathedral Creek, Lake Creek and Soldier Creek. Most of these water sources are supported by groundwater fed by winter snow fall and other precipitation on Cathedral Bluff and near Douglas Pass. The following surface water segment may be impacted by this project:

Table 5:

Water Quality Classification Table*					
		Use	**Protected Beneficial Uses**		
Segment	**Segment Name**	**Protected**	**Aquatic Life**	**Recreation**	**Agriculture**
22	All tributaries to the White River from above Douglas Creek to the Utah border	No	Warm 2	Primary Contact	Yes
23	Mainstems of East and West Douglas Creek including all tributaries	No	Cold Water 1	Primary Contact	Yes

***** Colorado Department Of Public Health And Environment, Water Quality Control Commission, Regulation No. 37 Classifications and Numeric Standards For Lower Colorado River Basin, Effective June 30, 2011

Segment 22 is protected for warm water aquatic life (Warm 2). The warm designation means the classification standards would be protective of aquatic life normally found in waters where the summer weekly average temperatures frequently exceed 20 °C. The Warm 2 designation means that it has been determined that these waters are not capable of sustaining a wide variety of warm water biota. Segment 23 is classified as Cold Water 1. This classification is protective of aquatic life, including trout, normally found in waters where the summer weekly average temperature does not frequently exceed 20 ºC. In general, the water quality standards for Cold Water class 1 waters are higher than for Warm Water class 2 waters. For example, the total recoverable iron limit is 1,000 µg/L for reach 23 and no limit for reach 22. However, both of these segments have standards that are protective from primary contact recreation and agriculture. There are no stream segments that impacted by this grazing lease that are listed on the section 303(d) list for the Clean Water Act. However, the mainstem of East Douglas Creek and West Douglas Creek are on the State's monitoring and evaluation list for total recoverable iron as shown in Table 6 below:

Table 6:

Clean Water Act Section 303(d) Impairment and Colorado's Monitoring and Evaluation List*			
WBID	**Segment Description**	**Portion**	**Monitoring & Evaluation Parameter(s)**
COLCWH23	Mainstem of East Douglas Creek and West Douglas Creek including all tributaries from their sources to the confluence	East Douglas Creek	Fe(Trec)

***** Colorado Department Of Public Health And Environment, Water Quality Control Commission, Regulation No. 93 Colorado's Section 303(D) List of Impaired Waters and Monitoring and Evaluation List, Effective April 30, 2010

Precipitation above Cathedral Bluff and the Roan Cliffs recharges springs that form along the base of Cathedral Bluffs that are a water source for livestock and wildlife. There is some surface runoff during spring months from snows accumulated at the higher elevations in protected

drainages, but most of the stream flow is associated with groundwater in the form of springs and thunderstorms. During the 1980s, the BLM conducted an extensive spring survey which is reflective of current knowledge of springs within the area. In 2010, the BLM conducted an additional spring inventory and identified seven springs in the headwaters of East Douglas (See Table 7).

Table 7:

Inventoried Springs in the Cathedral Bluffs Allotment

Description	Last Visited	Water Right No.	Twnshp No.	Twnshp Dir.	Range No.	Range Dir.	Section No.	Aliquot Part	Range Project
Bear Park Creek	1984	85CW530	005	S	101	W	010	SESE	Maintenance
Cathedral Bluffs Res #3	1984	98CW0141	005	S	101	W	012	SWSW	Unknown
East Douglas Creek	1984	85CW527	005	S	100	W	006	Lot 12	None
Big Spring Draw	1984	85CW528	005	S	101	W	001	Lot 8	None
Bear Spring #3	1984		004	S	101	W	036	Lot 2	Maintenance
Bear Spring #2	1984	W1987-73	004	S	101	W	035	SENE	Maintenance
Gilliam Spr 3	1984	W0467-71	004	S	101	W	036	NWNE	Reconstruct
Gilliam Draw Pond #2	1984	98CW0141	004	S	101	W	025	SESE	Maintenance
Gilliam Draw	1984	98CW0141	004	S	101	W	025	SESE	Maintenance
Brushy Point	1984		004	S	101	W	025	NESE	None
East Douglas Pond	1984	98CW0141	004	S	101	W	025	NESE	Maintenance
Gilliam Draw	1984	W0467-71	004	S	100	W	030	SENW	Abandon
Gilliam Draw	1984	85CW357	004	S	100	W	030	NENW	None
Gilliam Draw Creek	1984	W0467-71	004	S	100	W	019	SENW	Reconstruct
Sucker Creek	1984	W1983-73	004	S	100	W	017	SWNW	Salvage
Gilliam Draw Spr #2	1984	85CW385	004	S	100	W	003	NWSE	Abandoned
Cathedral Crk	2010	98CW0141	003	S	099	W	029	SWSW	Abandoned
Cathedral Crk	2010	85CW395	003	S	099	W	030	SWSE	None
Cathedral Crk	2010	98CW0141	003	S	099	W	029	NWSW	None
Cathedral Crk	2010	85CW395	003	S	099	W	030	SWNE	None
Cathedral Crk	2010	85CW340	003	S	099	W	030	SWNE	None
Cathedral Crk	2010	85CW340	003	S	099	W	030	NENW	None
Cathedral Crk	2010	85CW364	003	S	099	W	030	NENW	None
Cathedral Crk	2010	85CW393	003	S	099	W	030	NWNE	None
Cathedral Crk	2010	85CW384	003	S	099	W	030	NENW	None
Cathedral Crk	2010	85CW393	003	S	099	W	030	NWNE	None
E. Douglas Creek	1984		003	S	100	W	020	SWSE	None
Cathedral Crk	1984	85CW0389	003	S	100	W	024	NWNW	None

Inventoried Springs in the Cathedral Bluffs Allotment									
Description	**Last Visited**	**Water Right No.**	**Twnshp No.**	**Twnshp Dir.**	**Range No.**	**Range Dir.**	**Section No.**	**Aliquot Part**	**Range Project**
Cathedral Crk	1984		003	S	100	W	009	NESE	None
Cathedral Crk	1984		003	S	100	W	010	NWSW	None
E. Douglas Creek	1983	85CW388	003	S	100	W	011	NWNE	None
RF Tommy's Draw	1984	85CW388	003	S	100	W	002	NWSE	None
East Dry Lake	1984	98CW0141	002	S	100	W	028	NWNW	Salvage
E. Red Pt Draw	1984		002	S	100	W	030	Lot 5	None
Rocky Point Draw	1984	85CW390	002	S	100	W	021	SWNW	None
RF Rocky Pt Draw	1984		002	S	100	W	021	SWNW	None
Rock Point Draw	1984		002	S	100	W	016	SWSW	None
Phili Creek Spring	1984	96CW0337	002	S	100	W	009	SWNW	Salvage
Cow Canyon	1984		002	S	100	W	005	SENW	None
LF Rocky Pt Draw	1984		002	S	100	W	005	SENE	None
LF Rocky Pt Draw	1984		002	S	100	W	004	Lot 6	None
EF Rocky Pt Draw	1984		002	S	100	W	004	Lot 7	None
Philadelphia Creek	1984	85CW443	001	S	100	W	032	Lot 2	Reconstruct
Philadelphia Creek	1984	85CW443	001	S	100	W	032	SWNE	None
East Side Spring	1984	85CW377	001	S	100	W	032	SENW	Abandon
Right Fork Phili Creek	1984	85CW377	001	S	100	W	032	SWNE	Maintenance
Philadelphia Creek	1984		001	S	100	W	032	SENW	None
Philadelphia Creek	1984		001	S	100	W	032	NWNE	None
Right Fork Phili Creek	1984	85CW377	001	S	100	W	032	NENW	Reconstruct
Vandamore Draw	1984		001	S	100	W	019	Lot 11	None

The table shows the springs with range improvement projects and the management action recommended during the inventory. Most of the springs with range projects (typically a spring box with a pipe to a trough) were recommended for maintenance, reconstruction or abandonment and the number needing work was about the same in the early 1980s for those that were inventoried last summer.

Environmental Consequences of the Proposed Action: The grazing plan under the Proposed Action incorporates grazing control measures including timing (seasonal), duration,

and intensity of grazing. This management approach may improve use by giving vegetation a chance to reestablish during the growing season.

This allotment consists of eight pastures: Hogan, Willow Creek, Bear Canyon, Burma Road, Cathedral Creek, Tommy's Draw, Wardell (private), and Powell 4-A and the Proposed Action includes using these pastures in a rotation through the grazing period with two periods of use for most pastures. Water quality impacts from grazing tend to be greatest during the spring when conditions are muddy leading to more erosion and when plants are in the primary production phase and are typically more susceptible to impacts from grazing. Spring use pastures include Tommy Draw, Cathedral and Burma Road.

Grazing removes vegetation that may help reduce rain splash erosion, lessen surface runoff and livestock often preferentially remove grass and forb species that form root masses that hold together soil matrices better than non-desirable species. This may lead to a vegetation shift to grasses and forbs that are not as beneficial to water quality. Hoof action from trailing to and from water, nutrient and forage sources as well as travel through pastures create preferential flow paths that can concentrate overland flow and intercept subsurface flows.

Concentrated use will occur around water sources. Impacts from cattle use around water sources include compaction and direct impacts to vegetation from grazing. Springs can experience water quality impacts from cattle hoof action near the source and grazing of wetland plants typical of springs. In some cases trampling by cattle can cause springs to cease production or result in more surface water that can be subject to evaporation. A typical range improvement project will include fencing off the vegetation and the water source associated with the spring, installation of a spring box or infiltration chamber that collects water below the surface and feeds a pipeline that is run to a trough outside the fenced area. Troughs typically have an overflow designed to redirect water back to a location that would be similar to pre-disturbed conditions. These range improvements can protect the integrity of springs and maintain water quality downstream from springs. Failed range improvements can at times result in more impacts than undeveloped springs since broken pipelines and leaky troughs may extend the area disturbed around the spring and add to erosion impacts from livestock grazing.

The WRFO manages grazing on public lands according to the 1997 RMP that outlines Standards and Guidelines for Public Land Health and Colorado Livestock Grazing Management Guidelines. These Standards include guidelines for upland soils, riparian systems, healthy desirable plant species, and water quality (both surface and ground). The Water Quality may improve indirectly from the improved condition of the riparian areas under the Proposed Action management but should be evaluated for standards to maintain the beneficial functions of healthy riparian areas for water quality. One source of recoverable iron is likely from soils in the area that have active erosion. As grazing impacts are reduced or managed this source of iron from soils would likely be less and may reduce recoverable iron in the surface waters. With good grazing management impacts are not expected beyond those typically experienced on public lands.

Environmental Consequences of the No Grazing Alternative: The nonuse of this area for grazing would generally improve water quality as compared to the Proposed Action.

Mitigation: The following should be added as conditions of approval:

1. Springs inventoried in the early 1980s should be re-inventoried and range improvement projects on all springs should be evaluated to determine if resource damage is occurring. The range management specialist along with the permittee will determine which springs are valuable water sources. Springs with damaged range project should be repaired. Range improvements that are not valuable for managing livestock should be abandoned, including removing old pipelines and troughs. Maintenance of range improvements will be done in future years as time and budget allows to reduce livestock impacts to springs.

2. The BLM will assess the affects to springs and changes to the permit conditions may occur during yearly range management modifications to address specific situations.

3. The BLM may require lower stocking rates during periods of drought and/or during periods of drought recovery to improve upland health.

4. If the permittee observes accelerated erosion (rilling, gullying etc.) due to trailing, they will contact the authorized officer to determine if a change in management or a rangeland development project should be constructed the grazing approach altered to reduce impacts. Immediate action should be taken to reduce trailing issues when they are observed.

Finding on the Public Land Health Standard for water quality: There is currently no water bodies listed on Colorado's section 303(d) of the Clean Water Act. The Proposed Action is not likely to cause the exceedance of the Colorado water quality standards.

WETLANDS AND RIPARIAN ZONES (includes a finding on Standard 2)

Affected Environment: Within the Cathedral Bluffs allotment, there is approximately 55 miles of riparian area on BLM administered lands, riparian assessments of Proper Functioning Condition of these systems began in 1995 and were re-assessed in 2010. Table 8 below represents riparian systems which occur in the Cathedral Bluffs allotment, and the length of each system within the allotment.

Table 8:

SYSTEM	LENGTH (miles)
Cathedral Creek	5.36
Douglas Creek	13.5
East Douglas	18.48
Lake Creek	7.4
Soldier Creek	5.32
Willow Creek	5.07
Total	55.13

Riparian habitat assessments completed within the Cathedral Bluffs allotment in 2010 show that 49 miles (89 percent) of riparian habitat within the allotment rated at Proper Functioning Condition (PFC). Table 9 below is a breakdown of each reach of the six riparian systems and the length of those reaches rated as PFC in 2010.

Table 9:

Systems Rated as PFC Within Cathedral Bluffs Allotment					
System	**Reach**	**Assessment Date**	**Rating**	**Stream Type**	**Length (miles)**
Cathedral Creek	REACH 1	6/30/2010	PFC	PERENNIAL	2.98
	REACH 2	9/1/2010	PFC	PERENNIAL	1.51
	REACH 3	9/1/2010	PFC	PERENNIAL	0.87
				Total	5.36
Douglas Creek	REACH 1	5/27/2010	PFC	PERENNIAL	2.81
	REACH 3	5/26/2010	PFC	PERENNIAL	0.15
	REACH 4	5/26/2010	PFC	PERENNIAL	10.18
	REACH 5	5/26/2010	PFC	PERENNIAL	0.36
				Total	13.50
East Douglas Creek	REACH 1	6/24/2010	PFC	PERENNIAL	1.09
	REACH 2	6/24/2010	PFC	PERENNIAL	0.84
	REACH 3	6/24/2010	PFC	PERENNIAL	1.27
	REACH 6	6/23/2010	PFC	PERENNIAL	3.52
	REACH 7	6/3/2010	PFC	PERENNIAL	5.17
	REACH 8	7/29/2010	PFC	PERENNIAL	6.33
				Total	18.22
Lake Creek	Left Fork	7/14/2010	PFC	PERENNIAL	2.78
	Right Fork	7/14/2010	PFC	PERENNIAL	1.21
				Total	3.99
Soldier Creek	Left Fork	7/15/2010	PFC	PERENNIAL	1.20
	Middle Fork	7/15/2010	PFC	PERENNIAL	0.79
	Right Fork	7/27/1995	PFC	PERENNIAL	1.61
	REACH 1	9/22/2010	PFC	PERENNIAL	1.03
	REACH 2	9/22/2010	PFC	PERENNIAL	0.69
				Total	5.32
Willow Creek	REACH 1	7/8/2010	PFC	PERENNIAL	1.19
	REACH 5	9/9/2010	PFC	PERENNIAL	1.30
				Total	2.49
				Total PFC	48.88

The BLM rated approximately 6 miles (11 percent) of riparian habitat within the allotment as Functioning at Risk (FAR). Table 10 below is a breakdown of each reach of riparian system and the length of those reaches which rated as FAR in 2010, the table also includes the apparent trend of those reaches.

Table 10:

Systems Rated as FAR Within the Cathedral Bluffs Allotment					
System	**Reach**	**Assessment Date**	**Rating**	**Trend**	**Length (miles)**
East Douglas	REACH 4	6/23/2010	FAR	Not Apparent	0.26
Lake Creek	REACH 1	8/26/2010	FAR	Upward	3.41
Willow Creek	REACH 2	7/8/2010	FAR	Downward	1.60
	REACH 3	9/9/2010	FAR	Static	0.68
	REACH 4	9/9/2010	FAR	Upward	0.30
				Total FAR	6.25

Reach 4 of East Douglas Creek is a short reach, all but one element for this reach are properly functioning, the reason for a FAR rating is due to a large head-cut near the bottom of the reach causing vertical instability. This head-cut is likely due to a failed beaver dam, which has caused the stream to wash sediment downstream which was previously trapped behind the dam.

Reach 1 of Lake Creek is the longest reach within the allotment that was rated as FAR. This reach is very near PFC with an upward trend. Causative factors for rating this reach as FAR include presence of raw un-vegetated areas, an over widened channel, and vertical instability due to beaver activity. It is noted in the field observation form that this reach is very near PFC, and that the current livestock grazing schedule is compatible with continued riparian improvement.

As shown above, there are three reaches of the Willow Creek system which are functioning at risk. Reach 2 was the only reach within this allotment which appeared to have a downward trend. During the field assessment of this reach, it was noted that upland vegetation species were a large component of the vegetation community along this riparian area. Canada thistle a Colorado list B noxious weed was noted to occur heavily within the reach. Evidence of livestock use including trampling and bank shearing was seen along the reach, it is noted that this use is concentrated to certain areas, and does not occur along the entire reach. Although all attributes and processes necessary for healthy riparian systems were present or functioning, the presence of noxious weed species, large component of upland vegetation species along the reach, and limited areas of concentrated livestock use were factors in rating this system as FAR.

The BLM first assessed Reach 3 of Willow Creek in 1995 and was rated as non-functional with many of the attributes or processes necessary for functionality missing. When this reach was re-assessed in the fall of 2010 it appeared to be improving, as it was rated as Functioning at Risk. This system was very entrenched in the upper part of the reach, and generally lacked a floodplain; also there were few point bars, and areas where the bank had sloughed off. Riparian vegetation along the reach was present, and was adequately contributing to the functionality of the reach. There was no livestock use noted during the assessment of this reach.

Reach 4 of Willow Creek is a short reach, which was rated near PFC, with an upward trend. Overall, all of the attributes necessary for functionality were present, however there were a few areas along the reach where the banks had sloughed off and had not yet been stabilized by vegetation. This reach will likely rapidly improve to PFC as vegetation colonizes raw areas.

Environmental Consequences of Alternative A (Proposed Action): The Proposed Action is a continuation of the current system of grazing management Cathedral Bluffs allotment. Currently the grazing system appears to be compatible with improvement and maintenance of riparian areas within this allotment. The timing and intensity of grazing allows for maintenance of plant vigor on the uplands and limited cattle impact on the riparian areas. The BLM expects that all riparian areas that are currently rated as proper functioning condition would continue to meet standards and may improve slightly. With the implementation of the Proposed Action it is expected that reaches which were rated as FAR with an upward or static trend will continue to improve into proper functioning condition. Reach 2 of Willow Creek which was rated at FAR with a downward trend is very near PFC, due to livestock use concentrated in certain areas along the reach, it is not expected that implementation of the Proposed Action would lead to continuing decline or significant improvement of this reach. This reach would likely benefit the most from noxious weed treatments.

Environmental Consequences of Alternative B (No Grazing Alternative): Within the Cathedral Bluffs allotment, in general, no grazing would improve the riparian systems by allowing riparian vegetation to complete a full growth cycle, and an opportunity for improvement in vegetation along channel banks without grazing/trailing by livestock. Grazing in the riparian areas would still exist due to elk and deer in the area. The BLM expects there would not be as much trailing up and down the riparian zones. Systems that have been rated as FAR would remain functional but there should be an upward trend, systems that were rated as PFC would not be expected to change.

Mitigation: Implement noxious weed treatments along Willow Creek; specifically reach 2, primarily targeting Canada thistle. Noxious weed treatments will utilize materials and methods approved in advance by the authorized officer.

Finding on the Public Land Health Standard for riparian systems: There is approximately 55 miles of riparian systems on BLM administered lands associated with the Proposed Action that have been assessed. Currently approximately 53.5 miles of riparian habitat associated with the Proposed Action are meeting Colorado Public Land Health Standards for riparian systems, or moving toward meeting standards. Approximately 1.5 miles of riparian are not meeting standards, primarily due to a lack of riparian vegetation.

VEGETATION (includes a finding on Standard 3)

Affected Environment: Table 11 lists the plant community appearance for the Ecological sites or woodland types and public land acreage within the Cathedral Bluffs allotment, along with the predominant plant species composition of each community. Forb species, though important to the diversity of a community and making up to 25 to 30 percent of the composition of several of the plant communities listed, are not presented in the following table because they generally are not contributors to the appearance or dominance of the community. Approximately 4600 acres which are not represented by an ecological site such as rock outcrop are not included in this table.

Table 11:

Ecological Site / Woodland Type	Plant Community Appearance	Predominant Plant Species in the Plant Community	Acres
Alkaline Slopes	Sagebrush / Grass Shrubland	Wyoming big sagebrush, winterfat, low rabbitbrush, wheat grasses, Indian rice grass, squirreltail	2010.2
Brushy Loam	Deciduous Shrub / Grass Shrubland	Serviceberry, oakbrush, snowberry, mountain brome, slender wheatgrass, western wheatgrass, Letterman and Columbia needle grasses	6466.6
Clayey Foothills	Grass / Open Shrub Shrubland	Western wheatgrass, mutton grass, Indian rice grass, squirreltail, June grass, Wyoming big sagebrush, black sagebrush	938.7
Clayey Slopes	Grassland	Salina wildrye, mutton grass, western wheatgrass, June grass, squirreltail, shadscale	2864.6
Deep Clay Loam	Grass / Open Shrub Shrubland	Western wheatgrass, slender wheatgrass, mutton grass, squirreltail, June grass, Letterman and Columbia needle grasses, mountain big sagebrush	176.4
Deep Loam	Grassland	Bluebunch wheatgrass, muttongrass, needle-and-thread, western wheatgrass, slender wheatgrass, big sagebrush, serviceberry, snowberry.	35.7
Douglas-Fir	Douglas-Fir Woodlands	Douglas fir, serviceberry, chokecherry, snowberry, elk sedge, mountain brome	3783.3
Dry Exposure	Grassland	Beardless bluebunch wheatgrass, needle-and-thread, June grass, Indian rice grass, fringed sage, buckwheats	383.7
Foothill Swale	Grass / Open Shrub Shrubland	Basin wildrye, western wheatgrass, slender wheatgrass, streambank wheatgrass, Indian rice grass, Nevada bluegrass, basin big sagebrush, fourwing saltbush, rubber rabbitbrush	1499.3
Loamy Saltdesert	Grass / Salt Desert Shrubland	Needle-and-thread, galleta, Sandberg bluegrass, squirreltail, Indian rice grass, Gardner saltbush, shadscale, winterfat, horsebrush	32.9
Loamy Slopes	Mix Shrub / Grass Shrubland	Mountain mahogany, bitterbrush, serviceberry, mountain big sagebrush, beardless bluebunch wheatgrass, western wheatgrass, June grass, Indian rice grass	2019.7
Mountain Loam	Grass / Open Shrub Shrubland	Mountain brome, slender wheatgrass, western wheatgrass, Letterman and Columbia needle grasses, mountain big sagebrush, bitterbrush, low rabbitbrush, snowberry, serviceberry	1720.8
Mountain Swale	Grass / Open Shrub Shrubland	Basin wildrye, slender wheatgrass, western wheatgrass, Letterman and Columbia needle grasses, sedges, rushes, mountain big sagebrush, rubber rabbitbrush, snowberry,	29.0
Rolling Loam	Sagebrush / Grass Shrubland	Wyoming big sagebrush, winterfat, low rabbitbrush, horsebrush, bitterbrush, western wheat grass, Indian rice grass, squirreltail, June grass, Nevada and Sandberg bluegrass	545.0
Saltdesert Breaks	Salt Desert Shrubland	Galleta, salina wildrye, squirreltail, Indian rice grass, needle-and-thread, shadscale, winterfat	185.8
Stony Foothills	Grass / Open Shrub Shrubland	Beardless bluebunch wheatgrass, western wheatgrass, needle-and-thread, June grass, Indian rice grass, fringed sage, Wyoming big sagebrush, black sage, serviceberry, pinyon and juniper	13846.0
Pinyon/Juniper	Pinyon/Juniper Woodland	Pinyon pine, Utah juniper, mountain mahogany, bitterbrush, serviceberry, Wyoming big sagebrush, beardless bluebunch wheatgrass, western wheatgrass, June grass, Indian rice grass, mutton grass	44837.9

Ecological Site / Woodland Type	Plant Community Appearance	Predominant Plant Species in the Plant Community	Acres
Spruce/Fir	Spruce / Fir Forest	Douglas fir, serviceberry, chokecherry, snowberry, elk sedge, mountain brome	2114.6
Quaking Aspen	Aspen Woodlands	Aspen, mountain brome, Columbia and Letterman's needlegrass, nodding brome, Snowberry, chokecherry, serviceberry	703.1
		Total	84193.3

Figure 1 below is a representation of the vegetation growth periods for different vegetation types found on the Cathedral Bluffs allotment. These dates are based upon estimated averages and can vary from year to year dependent upon climatic conditions.

Figure 1:

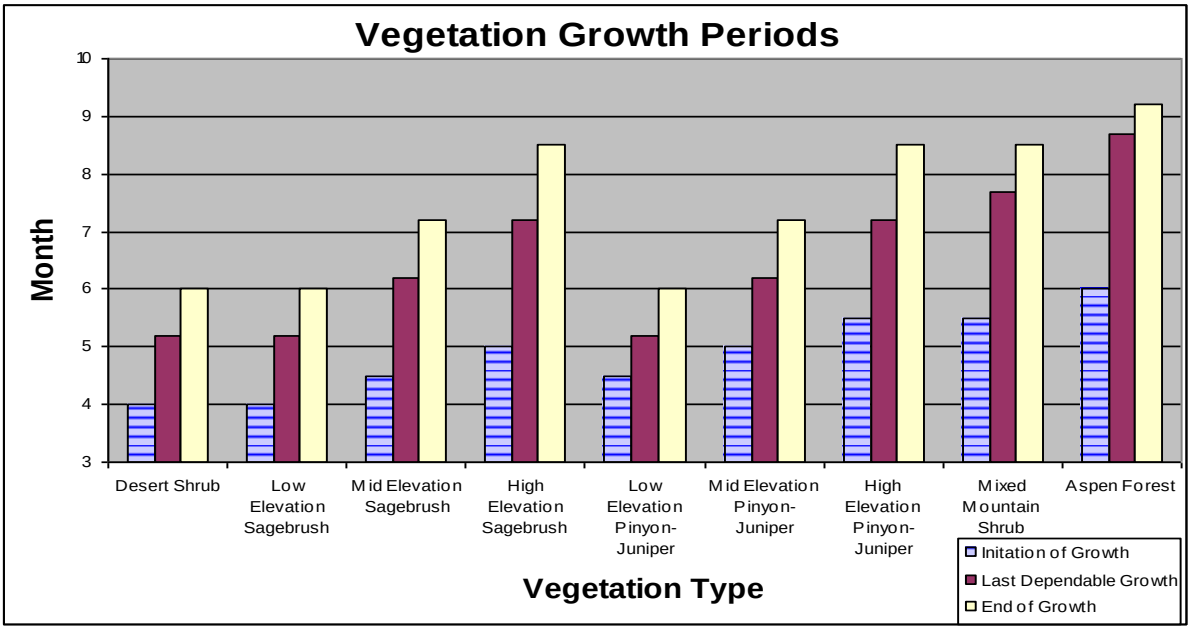


Table 12 below shows the seral rating used by the BLM to rate rangeland vegetation communities in comparison to the Desired Natural Plant Community (DNC) for a particular ecological site.

Table 12:

ECOLOGICAL SITE SIMILARITY RATINGS	
Seral Rating	**% Similarity to the Potential Natural Plant Community (PNC)**
Desired Natural community (PNC)	76-100% composition of species in the DNC
Late-Seral	51-75% composition of species in the DNC
Mid-Seral	26-50% composition of species in the DNC
Early-Seral	0-25% composition of species in the DNC

Table 13 shows an estimate of the public land acreage falling within one of the seral ratings for each ecological site on the allotment associated with this permit renewal. The BLM visited the ecological sites during the 2010 field season for a plant community assessment of the Colorado Public Land Health Standards on this allotment. In general the rating of plant communities as early seral is due to the presence of cheatgrass (*Bromus* tectorum) or other invasive/non-native species, and the loss of adequate perennial vegetation cover. The early seral sites not meeting standards have crossed a threshold and are nearly irreversible regardless of the livestock management without some form of disturbing activity such as fire, mechanical, and/or chemical control.

Table 13:

Cathedral Bluffs Allotment (06349)						
Ecological Site Similarity Rating						
Ecological Site	**Total BLM Acres**	**DNC**	**Late Seral**	**Mid Seral**	**Early Seral (Not Meeting Standards)**	**BLM Acres Classified**
Alkaline Slopes	2010	1515	139	310	47	1964
Aspen Woodlands	703	703	0	0	0	703
Brushy Loam	6467	6467	0	0	0	6467
Clayey Foothills	939	939	0	0	0	939
Clayey Slopes	2865	2827	3	11	23	2841
Deep Clay Loam	176	176	0	0	0	176
Deep Loam	36	36	0	0	0	36
Douglas-Fir woodlands	3783	3783	0	0	0	3783
Dry Exposure	384	384	0	0	0	384
Foothill Swale	1499	1067	216	217	0	1499
Loamy Saltdesert	33	33	0	0	0	33
Loamy Slopes	2020	2020	0	0	0	2020
Mountain Loam	1721	1721	0	0	0	1721
Mountain Swale	29	29	0	0	0	29
None	4521	N/A	N/A	N/A	N/A	N/A
PJ Woodlands	44838	N/A	674*	N/A	N/A	674
Rolling Loam	545	545	0	0	0	545
Saltdesert Breaks	186	161	0	0	25	161
Spruce-Fir woodland	2115	2115	0	0	0	2115
Stoney Foothills	13846	13596	114	130	6	13840
Total:	88715	38116	1145	668	101	40030

*These acres represent vegetation treatments conducted within PJ woodlands Ecological Sites

As shown, within the Cathedral Bluffs allotment 101 acres are currently not within acceptable thresholds for healthy communities and within acceptable levels of desired plant communities (mid to DNC) as defined in the White River ROD/RMP. Vegetation production and species composition on sites which are rated as mid seral to DNC provide adequate cover for soil protection and forage production to meet foraging demands. Many of the allotment's acres consist of ecological sites that are not classified as rangeland such as pinyon (*Pinus edulis*)/juniper (*Juniperus osteosperma*) (PJ) woodlands (44838 acres), and rock outcrops/steep slopes (4521 acres). These acres are within acceptable land health standards status due to the

low impact from livestock and/or wildlife use because of their state of lacking natural resources (i.e. forage).

Many acres of the mid/late seral communities have a higher composition of mountain big sagebrush (*Artemisia tridentata spp. vaseyana*) and encroaching PJ trees into the sagebrush communities which has resulted primarily from a lack of a natural fire regime and from grazing influences. The early seral communities not meeting Public Land Health Standards in the Cathedral Bluffs allotment are primarily valley bottom, valley toe-slope, and/or flats sites which have been degraded from historic grazing influences such as historic spring use, as well as sites which have had vegetation removed in association with oil and gas production. The majority of these early seral communities not meeting health standards lie within the Hogan pasture in the northern portion of the allotment where there is an increase in cheatgrass (*Bromus tectorum*) in the plant community. Overall, early seral communities not meeting the Colorado Public Land Health Standards are due to concerns/lack of species diversity, soil protection, and/or forage production. However, the majority of these early seral areas not meeting Public Land Health Standards have crossed a threshold of annual plant domination where condition would not significantly change with or without livestock grazing.

Environmental Consequences of Alternative A (Proposed Action): Under this alternative, cattle use during the spring critical growing season within the Hogan draw pasture is deferred every year beginning March 31, which provides complete growing season rest every year. In April during the beginning of the critical growing season, cattle utilize the Tommy's draw pasture for a short duration before being moved to the next pasture, this short duration grazing allows for an adequate regrowth period for plants that are grazed during this time. During the middle and end of the critical growing season, typically May 1 to June 15, spreads livestock across three pastures in order to ensure low stocking densities within those pastures. Lower stocking density provides for lower utilization levels, as there is more area/forage available to each animal, which provides adequate growth and regrowth potential during the critical growing season as individual plants are generally only grazed once or not at all. During summer months, cattle graze in higher elevation pastures where plants have had opportunity to complete a full growth cycle. Cattle are again spread across multiple pastures during the fall and early winter grazing season which provides lower stocking density. During the winter dormant season the entire livestock herd grazes the lower elevation Hogan pasture until early spring when the rotation starts again. The combination of short duration grazing and low stocking density grazing within the proposed grazing plan, allow adequate growth/regrowth periods for rangeland vegetation, and should prevent degradation to the vegetation communities.

Environmental Consequences of Alternative B (No Grazing Alternative): Under a no grazing by livestock alternative, most localities that are being grazed by cattle would experience a short-term increase in both perennial plant cover and soil surface litter accumulation. Mid seral ecological sites would likely experience the greatest benefit of increased perennial plant cover. On early seral ecological sites such as the areas dominated by sagebrush or on rangelands where monocultures of cheatgrass exist, the majority of these areas are not expected to change in perennial plant cover because they have crossed a threshold of total sagebrush and/or annual plant domination. The DNC ecological sites would continue to meet standards and experience minimal changes in plant species composition and diversity.

Mitigation: See mitigation identified in Soils section

Finding on the Public Land Health Standard for plant and animal communities (partial, see also Wildlife, Aquatic and Wildlife, Terrestrial)*:* The early seral communities are mostly not meeting the Standards due to the significant composition of cheatgrass, an invasive annual grass, and due to the monocultures in some sagebrush and grassland communities (101 acres). The remaining vegetation communities (Mid – DNC seral rating) are currently meeting standards and make up the bulk of classified acres on the allotment (39,929 acres). Implementation of the Proposed Action will enhance the ability of the rangelands to meet the Standards in the future.

INVASIVE, NON-NATIVE SPECIES

Affected Environment: Cheatgrass (*Bromus tectorum*) is an invasive, non-native species found in the Cathedral Bluffs allotment, located primarily in lower elevation pastures, in drainage bottoms. It is also located in trace amounts in the rest of the pastures within the allotment especially along road sides and in disturbed areas. The invasive shrub Saltcedar (*Tamarix ramosissina*) occurs largely along the Douglas Creek riparian corridor, as well as along East Douglas Creek and around upland water sources such as earthen reservoirs, and seeps. Bull thistle (*Cirsium vulgare*) and Canada thistle (*Cirsium arvense*) are two list B noxious weeds that are known to occur on the allotment. Houndstongue (*Cynoglossum officinale*) a list B noxious weed is known to occur in higher elevations within the Cathedral Bluffs allotment, especially in the Bear Park area. The annual forb Halogeton (*Halogeton glomeratus*) a list C species occurs within the allotment, primarily associated with roadsides, and disturbed areas.

Environmental Consequences of Alternative A (Proposed Action): Under the Proposed Action, the grazing schedule would help ensure that native forage species and associated plant communities have an opportunity for re-growth and seed production later in the growing season. The Proposed Action alternative offers potential to maximize vigor of the grass component of the various ecological sites involved on the BLM administrated lands. These sites would necessarily be more resilient to invasion by such undesirable species. While noxious weeds readily invade rangelands at all seral stages, the rate and extent of invasion would be much less for mid and late seral rangelands with a vigorous, competitive compliment of perennial grasses, shrubs, and forbs. However, even under the Proposed Action, areas strongly dominated by cheatgrass would likely only show slight improvement in composition over time.

Areas where cheatgrass has crossed a transitional threshold and is essentially in a stationary state would not undergo any change as a result of livestock management. Without a human induced disturbance such as fire or herbicidal treatment to remove cheatgrass dominance, accompanied by seeding of adapted perennial grasses to preempt the return to cheatgrass dominance, it is likely to remain in its present state.

Livestock can act as a vector for noxious/non-native seed due to the ability of seeds to attach to animal fur or pass through animal feces. This could increase the possibility of non-native or invasive species spreading as livestock move through the allotment. Stewardship, on-the-ground

knowledge and familiarity with assigned allotment use areas provided by livestock grazing permittees are primary factors in the discovery, treatment, and control of noxious weeds on public lands.

Environmental Consequences of Alternative B (No Grazing Alternative): No grazing would allow full growth potential of the vegetative community that has not been grazed by wildlife or wild horses. A robust plant community is more resistant to the invasion of invasive, non-native species and would therefore reduce the risk of spreading or introduction new invasive/non-natives in the area. With no grazing, the BLM would lose the grazing permittee commitment to noxious weed management. The applicant is a valuable participant in the detection and eradication of noxious weeds on the BLM and private lands within the allotment associated with the Proposed Action

Mitigation: Treatment of noxious and or invasive species on BLM administered lands will be done using materials and methods approved in advance by the Authorized Officer.

THREATENED, ENDANGERED, AND SENSITIVE PLANT SPECIES and AREAS OF CRITICAL ENVIRONMENTAL CONCERN (ACECs) (includes a finding on Standard 4)

Affected Environment: The Proposed Action area overlaps the South Cathedral Bluffs ACEC and the E. Douglas Creek / Soldier Creek ACEC. Both ACECs support biologically diverse plant communities. No known threatened or endangered plant species inhabit the Proposed Action area. A number of BLM sensitive plant species are prevalent in this area, especially within the South Cathedral Bluffs ACEC. While most of the BLM sensitive plant species within the Proposed Action's area of potential effect are on private or Colorado Parks and Wildlife (CPW) land, occupied sensitive plant habitat does extend onto BLM land in a few small areas. Table 14 lists the BLM sensitive plant species known to inhabit areas inside this grazing allotment on BLM land.

Table 14:

Special Status Plants	Township	Range	Section
Thalictrum heliophilum	4S	100W	14, 10, 12
Thalictrum heliophilum, Gentianella tortuosa	3S	100W	13
Thalictrum heliophilum	3S	100W	14
Lesquerella parviflora	3S	100W	24
Thalictrum heliophilum	3S	99W	19

These plant species tend to occur on barren outcrops of white shale. Their habitats are often impassably steep slopes, especially in the S. Cathedral Bluffs ACEC.

The BLM conducted a survey for existing grazing effects on sensitive plant species on June 28, 2010, and identified evidence of moderate cattle activity in the region within 100 meters of special status plant habitat. Cattle trails were apparent, especially leading to Soldier Creek. Evergreen forests on plateaus above Soldier Creek showed evidence of cattle bedding and excrement.

On the white shale slopes where sensitive plant species are located, evidence of cattle activity was minimal. There were a few tracks where it was clear that cattle had passed through the area, but there was no evidence of bedding or grazing within sensitive plant habitat. Most of the special status plant habitat in this area is impassably steep, and it is presumable that cattle would avoid these areas and navigate through gentler terrain that does not support special status plants.

No sensitive plants observed showed evidence of herbivory or trampling. Grazing in the area appears to have no direct impacts on sensitive plant species.

Environmental Consequences of the Proposed Action: The Proposed Action will maintain current levels of cattle grazing and duration therefore the affects to sensitive plants and their habitats would remain the same. The Proposed Action will result in no direct impacts to special status plant species and indirect impacts to sensitive plant species would continue at current levels, through cattle trailing through suitable plant habitat and cattle droppings on hilltops above occupied sensitive plant habitat. The indirect impacts observed during the June 2010 survey did not appear to be negatively affecting sensitive plant health, vigor, or reproduction. It is unlikely that the indirect impacts to sensitive plant habitat caused by continued cattle use as a result of the Proposed Action would adversely affect any sensitive plant individuals.

The cumulative impacts of the Proposed Action include an increased number of cattle trails in the vicinity of sensitive plants as well as trampling and bedding on top of neighboring plant communities. However, it is unlikely that these impacts would adversely affect sensitive plant species. Previous studies of the sensitive plant communities in the area show that cattle are unlikely to use sensitive plant habitat because it is so steep and barren. Existing sensitive plant communities have been resilient to indirect effects of years of nearby cattle use, and thus it is anticipated that continued cattle use of the area will not adversely affect sensitive plant species.

Environmental Consequences of the No Action Alternative: There would be no impacts to special status plant species as a result of the no action alternative.

Mitigation: The sensitive plant habitat in the area will continue to be monitored by BLM botanists to ensure that impacts to plant communities are minimal. No additional mitigation measures are necessary.

Finding on the Public Land Health Standard for Threatened, Endangered and Sensitive plant species: The Proposed Action will have a minimal influence on existing populations of sensitive plant species. Existing populations of special status plants will not be affected under the no action alternative. Given that current cattle use rates are not directly affecting sensitive plants and that cattle use rates will not change, the Proposed Action would have no influence on the status of applicable land health standards.

THREATENED, ENDANGERED, AND SENSITIVE ANIMAL SPECIES (includes a finding on Standard 4)

Affected Environment: There are no animals listed, proposed or candidate to the Endangered Species Act that are known to inhabit or derive important use from the project area. Several BLM sensitive species occur or may occur within the allotment boundaries. These species will be addressed individually below. See Aquatic Wildlife section for discussion on BLM sensitive mountain sucker, Colorado River cutthroat trout, northern leopard frog and Great Basin spadefoot.

Brewer's sparrows are commonly found in sagebrush habitats from lower elevation sage-steppe to higher elevation mountain big sagebrush communities. These birds are widely distributed at appropriate densities in big sagebrush communities (~ 20,800 acres) throughout the entire allotment.

Northern goshawks are a relatively rare resident in the White River Resource Area. In general this species prefers to nest in contiguous aspen stands, or spruce-fir/aspen mix stands. Within the last several decades however, approximately half a dozen nests have been found in low to mid elevation (6500 ft) pinyon-juniper woodlands throughout the Piceance Basin. Aspen and Douglas fir/spruce-fir communities (~700 and 5900 acres, respectively) in addition to mature components of the approximately 45,000 acres of pinyon-juniper woodlands within the permit area may provide nesting habitat for this species however, no known nests have been documented within the allotment.

Similarly, mature components of the allotments nearly 45,000 acres of pinyon-juniper woodlands may provide roosting substrate for the three BLM-sensitive bat species. Although the distribution of these bats is poorly understood, recent acoustical surveys in the Piceance Basin and along the lower White River have documented the localized presence of Townsend's big-eared and big free-tailed bat along larger perennial waterways. These bats typically use caves, mines, bridges, and unoccupied buildings for night, nursery, and hibernation roosts, but in western Colorado, single or small groups of bats use rock crevices and tree cavities. Although rock outcrops and mature conifers suitable as temporary daytime roosts for small numbers of bats are widely available within the allotment, and relatively extensive riparian communities are available along Douglas Creek and East Douglas and its tributaries, there are no underground mines or known caves, and unoccupied buildings are extremely limited in the project area. Birthing and rearing of young for these bats occurs in May and June, and young are flighted by the end of July. The big free-tailed bat is not known to breed in Colorado.

The midget faded rattlesnake occurs solely within the Green River Formation of Wyoming, Utah, and Colorado and is typically associated with bedded sandstone outcrops and fallen midslope slabs on south to southeast facing exposures. In general, this species occurs in high, cold deserts dominated by sagebrush with some greasewood, juniper, and other woody plants occurring as secondary vegetation. These snakes emerge from hibernacula (dens) in mid-April. Gravid females and juveniles tend to remain in rock outcrop habitat in close proximity to their dens (20-200 meters) throughout the summer and early fall months, while males and non-reproductive females disperse an average of 1 km from the den. All snakes return to their den sites in mid to late October. South-facing rock slabs and/or rock outcrops found throughout the allotment may potentially support populations of this species.

Environmental Consequences of the Proposed Action: It is unlikely the proposed grazing system would directly disrupt nesting activities of northern goshawk, even in those pastures where livestock use coincides with all or portions of the breeding season (Tommy's Draw, Willow Creek, Cathedral Creek Burma Road and Powell 4-A). Most of the preferred nesting habitat (i.e., higher elevation aspen and spruce-fir forests) is generally inaccessible to livestock due to rugged, steep terrain and likely only receives incidental use. Concentrated use by livestock during the growing season has the potential to reduce plant vigor, alter herbaceous composition and decrease the residual component. These changes may lead to reductions in both avian and mammalian prey populations over time, however these reductions would be localized and likely have little measurable influence on goshawk numbers.

Because limited information exists on midget faded rattlesnake distributions within the allotment, it is difficult to determine what influence the Proposed Action may have on rattlesnake abundance, although it is suspected that grazing influence would be minor. Should areas of concentrated livestock use lie in close proximity to hibernacula/preferred habitat (mid-slope slabs/rock outcrops), reductions in herbaceous groundcover and residual components may influence (i.e., decreased diversity and/or abundance) small mammal populations, which at a localized level, may potentially influence rattlesnake abundance. The BLM suspects that most of the preferred habitat for this species generally does not receive heavy livestock use due to topographical constraints.

The project area generally lacks any form of suitable hibernacula for the BLM sensitive bat species. The BLM does not anticipate that livestock use (proposed and current) will directly affect roosting bats or detract from habitats important for bat species.

See discussion on Brewer's sparrow in Migratory Bird section.

Environmental Consequences of the No Action Alternative: Benefits from livestock removal would be most pronounced in those approximately 700 acres that are currently in a mid seral state. Due to the pervasiveness of cheatgrass in those 100 acres of early seral communities, it is unlikely that removal of livestock would lead to any substantial improvements in those communities. Increases in herbaceous cover height and density would likely result in a similar response in small mammal populations currently associated with these habitat types in the short-term, with small mammal community changes occurring in the long-term. However, due to the low density of northern goshawk throughout the Resource Area, it is unlikely this would prompt a measurable response in goshawk numbers. Similarly, increases in the small mammal community may benefit rattlesnake populations on a localized level. It is suspected that livestock removal, overall, would have little influence on rattlesnake abundance and distribution throughout the allotment.

Mitigation: None

Finding on the Public Land Health Standard for Threatened & Endangered species: There are no threatened, endangered or animals listed as candidate under the Endangered Species Act that inhabit the allotment and as such the land health standards would not be applicable. With the exception of roughly 100 acres of annual dominated communities, this allotment

generally meets the land health standards for BLM sensitive species. There is no reasonable likelihood that the proposed or no action alternative would have an influence on the condition or function of sensitive animal species habitat. Livestock use, as proposed, appears fully consistent with the maintenance and continued development of those habitat features important to Brewer's sparrow, northern goshawk and midget faded rattlesnake.

MIGRATORY BIRDS

Affected Environment: The Cathedral Bluffs allotment spans a wide range of elevations and vegetation types which provide nesting habitat for a variety of migratory bird species during the breeding season (mid-May through mid-July). Elevation ranges from 5300 feet to nearly 9000 feet. Pinyon-juniper is the dominant woodland type (~45,000 acres) with another nearly 5900 acres of Douglas-fir/spruce fir types and 700 acres of aspen communities. Mountain shrub communities including: serviceberry, snowberry, Gambel oak, bitterbrush and mountain mahogany comprise another 8500 acres. Sagebrush (Wyoming, mountain and basin big sagebrush) and grass/open shrubland make up 20,800 acres with grasslands comprising the remaining 3300 acres. Roughly, 100 acres of the Hogan pasture are currently outside of acceptable thresholds for healthy vegetative communities due to the dominance of annual, invasive species (i.e., cheatgrass). These cheatgrass dominated areas provide little in the way of functional forage and cover resources for most avian species.

Birds recognized by the U.S. Fish and Wildlife Service as having higher conservation interest that may be present in the permit area include: Brewer's sparrow (sagebrush communities), juniper titmouse, and pinyon jay (pinyon-juniper woodlands), Cassin's finch (spruce-fir forests) and flammulated owl (aspen communities). In addition, there are several creeks within the allotment that provide habitat for riparian obligates such as yellow-breasted chat, song sparrow, lazuli bunting and yellow warbler. In general, all species associated with these habitats are well represented in the permit area. There are no specialized or narrowly endemic species known to inhabit or make important use of the allotment.

Environmental Consequences of the Proposed Action: Proposed grazing periods would not coincide with and would have no potential to directly influence migratory bird nesting activities in the Hogan and Bear Canyon pastures. Although dormant season use may reduce the amount of residual component remaining for the early portions of the following nesting season in general, livestock removal by late March (Hogan pasture) should allow for unaffected development of herbaceous growth prior to and during the nesting season. Similarly, livestock are not expected to have substantial influence on the allotments nearly 45,000 acres of pinyon-juniper woodlands, 5900 acres of Douglas-fir/spruce fir types and 700 acres of aspen communities or those species that are closely associated with these habitat types. Although steeper slopes do receive incidental to light use, there would be very little potential for grazing actions to directly disrupt nesting activities.

Proposed grazing use of the Tommy's Draw, Willow Creek, Cathedral Creek, Burma Road and Powell 4-A pastures would coincide with portions of the migratory bird nesting season.

Tommy's Draw pasture – Grazing use in this pasture would be coincident with the early portions of the nesting season annually (4/1 – 5/31), with livestock returning in mid-November and remaining through the end of December. It is anticipated that most of the grazing will be concentrated within the valley bottoms, particularly early in season when snow levels remain higher at upper elevations. Reductions in herbaceous ground cover would be expected prior to and during the early portions of the nesting season. Removal of livestock by the beginning of June would, depending on elevation, allow for 2 - 5 weeks of regrowth opportunities.

Willow Creek and Burma Road pastures – Livestock use in these pastures would have the greatest potential to influence migratory bird nesting activities as use is coincident with nearly the entire nesting and brood-rearing season (5/1 – 6/30). Livestock would then return for the months of October (Burma Road) and November (Willow Creek and Burma Road). A large portion of these pastures are comprised of more rugged woodland communities (pinyon-juniper, spruce-fir or aspen) and as such, livestock use will likely be concentrated in the valley bottoms and/or open ridge tops as well as the more moderate slopes during the summer months with most of the dormant season (10/1 -11/30) use confined to the lower elevation bottom lands.

Cathedral Creek pasture – As proposed, grazing use would overlap the early portions of the nesting season extending into the early portions of brood-rearing (5/1 – 6/15) with livestock returning during the late fall/early winter (11/1 – 12/30).

Livestock use during the nesting season would have the most influence on ground and low shrub nesting species associated with open shrubland and grasslands communities and in areas in close proximity to water, as these areas typically tend to be where livestock use is concentrated. Woodland (pinyon-juniper, spruce-fir and aspen) obligates are likely minimally influenced by grazing practices as much of these habitats are generally inaccessible to livestock due to rugged topography. Dormant season use of the above mentioned pastures has the potential to reduce the amount of residual available for nesting material and cover resources for the subsequent breeding season. While there are small inclusions (~100 acres) that have crossed a threshold to annual dominated vegetative communities (cheatgrass), the allotment as a whole appears to be compatible with continued maintenance of habitats important for migratory bird nesting activities. It will be important for continued monitoring of the allotment, particularly those approximately 700 acres of mid seral communities and riparian habitats to determine positive or negative influences associated with grazing practices.

Environmental Consequences of the No Action Alternative: The BLM expects that livestock removal would have little effect on breeding bird abundance or reproductive/recruitment success in the permit area's nearly 45,000 acres of pinyon-juniper, 5900 acres of Douglas-fir/spruce fir woodland types and 700 acres of aspen communities. Low forage availability and more rugged terrain likely limit livestock use of these habitats. In general, birds associated with these woodland types do not tend to respond positively to relatively minor increases in herbaceous expression. Similarly, livestock removal is not expected to yield any substantial improvements on the approximately 100 acres of early seral communities in the lower elevation pastures (Hogan and Tommy's Draw). These cheatgrass monocultures, likely a result of historical grazing practices, have crossed a threshold where improvements/shifts in composition are nearly impossible.

Positive vegetation responses would be most pronounced in the allotments ~700 acres of mid seral communities and those areas that currently experience intense livestock use in conjunction with the migratory bird nesting season. Removal of livestock would be expected to maintain and/or improve plant vigor and composition. Increases in density, height, and horizontal cover would be expected to yield measurable positive responses in nongame bird populations across this pasture, likely within a 10-year period. It is expected that nesting birds associated with those communities/areas that receive heavy levels of utilization (i.e., riparian, valley bottoms, aspen), would be expected to undergo substantive increases in response to full herbaceous expression.

Mitigation: None

WILDLIFE, AQUATIC (includes a finding on Standard 3)

Affected Environment: There are several creeks within the Cathedral Bluffs allotment that support higher order aquatic vertebrate populations, including cutthroat trout, speckled dace and northern leopard frog, a BLM sensitive species. Each will be discussed individually below. See discussion regarding stream conditions in Wetlands and Riparian Zones.

Cathedral Creek runs along the northern edge of the Burma Road, Willow Creek and Cathedral Creek pastures. Approximately 5.36 miles of Cathedral Creek occurs on BLM administered lands. The BLM conducted fish sampling 2008 at which time only speckled dace were collected and were found to be extremely abundant. Speckled dace are a warm water and sediment tolerant species and are adapted to relatively high sediment loads. Cathedral Creek may potentially support small numbers of cutthroat trout which are commonly found in the upper reaches of the Lake and Soldier Creek tributaries. Northern leopard frog, a BLM sensitive species, was also common along this creek. This species prefers wet meadows, and banks and/or shallows of creeks and streams.

Douglas Creek runs along the entire western border of the Hogan pasture and extends approximately two miles along the western edge of the Tommy's Draw pasture. The BLM administers approximately 13.5 miles of Douglas Creek. The BLM conducted fish sampling in April 2010, and speckled dace were the only species collected.

East Douglas Creek parallels the western edge of the Tommy's Draw and Burma Road pastures, with the headwaters located in the Bear Canyon pasture. The BLM administers approximately 18.5 miles of East Douglas Creek. Cutthroat trout are common in the upper reaches, with speckled dace observed in the lower reaches. During the 2010 assessment, the BLM observed small numbers of northern leopard frog along the lower reaches.

The headwaters of Willow Creek are located in the Willow Creek pasture. The lower reaches of willow creek separate the Burma Road and Willow Creek pastures. Roughly five miles administered by the BLM. This system does not appear to support any fish populations.

The majority of Lake Creek and Soldier Creek are located in the Cathedral Creek pasture. Nearly 12.75 miles are located on public lands. The upper reaches of these creeks (~7.59 miles) are high elevation systems which are virtually inaccessible to livestock. The upper reaches of both systems provide habitat for cutthroat trout. Important habitat components for trout species include systems with consistently cool water temperatures, channels with an appropriate mix of riffles and pools, and diverse forms of channel cover, including undercut banks. An adequate sedge/rush component is important for maintenance of quality trout habitat. These obligate forms of vegetation possess massive and deep root systems that are superior in armoring the banks from water erosion and providing tenacious sites for sediment retention that support channel functions that promote channel deepening and narrowing (low width:depth ratios). These traits are fundamental to the development of the most important elements of trout habitat in this area: the formation of stable undercut banks as cover, and channels with width:depth ratios that buffer water temperatures and increase the incidence of flooding (prey input).

Beaver-occupied, willow-dominated aquatic habitats are abundant and well-distributed on those portions of Douglas, East Douglas, Cathedral and Willow Creeks encompassed by the allotment.

Environmental Consequences of the Proposed Action: Based on stream assessments conducted in 2010 nearly 90percent of the BLM administered reaches were found to be in proper functioning condition with the remaining 10 percent in a functional-at-risk state with either static or improving trends. Much of the habitat that was considered to be functioning-at-risk was along Willow Creek, the only system within the allotment that does not currently support higher order aquatic vertebrate species. While there were some areas were trailing and concentrated use was evident, the current grazing system appears to be compatible with continued maintenance of conditions necessary to support fisheries. Stream assessments and fish sampling should be done periodically to ensure that conditions continually meet standards for support of aquatic wildlife communities.

Environmental Consequences of the No Action Alternative: Livestock removal would allow for full vegetation expression (with the exception of continued grazing and browsing by elk and wild horses), particularly in those areas that experience prolonged livestock use during the growing season. Much of the primary trout habitat (upper reaches of Lake, Soldier and East Douglas) is virtually inaccessible to livestock therefore removal of livestock would likely have no effective influence on aquatic conditions. Without livestock use, willow would likely be more abundant and available as material for use by beaver.

Mitigation: None

Finding on the Public Land Health Standard for plant and animal communities (partial, see also Vegetation and Wildlife, Terrestrial): With regards to providing habitat that is occupied by cutthroat trout, speckled dace and northern leopard frog, BLM administered aquatic systems within the Cathedral Creek allotment generally meet the land health standards for aquatic wildlife communities. Those reaches that currently are not considered to be in proper functioning condition (~11 percent) do not appear to hamper continued support of fisheries populations. The proposed and no action alternatives are not expected to detract from continued meeting of the land health standards for aquatic wildlife.

WILDLIFE, TERRESTRIAL (includes a finding on Standard 3)

Affected Environment: The allotment spans elevations that support big game populations throughout the year. Much of the Bear Canyon, Powell 4-A, Burma Road and Willow Creek pastures are categorized by the CPAW as big game summer range. These higher elevation pastures support large, contiguous stands of aspen commonly used by big game from May through October. With the exception of portions of the Hogan pasture, the remainder of the allotment is classified as general big game winter range. These ranges receive heaviest use from October through January. Nearly all of the Hogan pasture is categorized as mule deer winter concentration/severe winter range – a specialized component of winter range that periodically supports virtually all an area's deer under the most severe winter conditions (i.e., extreme cold and heavy snow pack). These ranges typically receive the heaviest use from January through April.

Breeding raptor use of the project area is represented largely by woodland accipitrine species. Mature components of the allotment's ~45,000 acres of pinyon-juniper, 700 acres of aspen and 5900 acres of Douglas fir/spruce-fir woodlands likely support a small number of breeding sharp-shinned and Coopers hawk, red-tailed hawk, long-eared, great horned, saw-whet, flammulated and pygmy owl. Rock outcrops may provide potential nest substrate for golden eagle and red-tailed hawk. There are dozens of known raptor nests located in and immediately adjacent to the allotment.

Limited information exists on small mammal use and distribution within the allotment; however it is suspected that nongame species using the allotment's habitats are typical and widely distributed in extensive like habitats across the Resource Area and northwest Colorado. There are no narrowly endemic or highly specialized species known to inhabit those lands potentially influenced by this action. Less than one percent (~100 acres) of the allotment is classified as an early seral community due to its dominance of annual, invasive species. These early seral communities normally have limited forage and/or cover value for nongame birds and mammals, and while breeding densities may be reduced in these small inclusions, it is suspected that community diversity and densities across the allotment as a whole are not strongly suppressed or below their potential. Non-game populations associated with the upland communities, particularly dense mountain shrub basins that retain more fully developed understories, likely occur at densities that approach habitat potential. The abundance of non-game animals associated with gentle gradient upland shrub types where the ecological status of herbaceous ground cover is classified as mid-seral are likely suppressed to some degree, but population viability probably remains relatively intact.

Environmental Consequences of the Proposed Action: Proposed livestock use of the Hogan Draw, Tommy's Draw and Willow Creek pastures would coincide with big game use during a portion of the winter and early-spring. While there is likely some degree of competition, particularly in extreme winters, there is no evidence of chronic or ongoing conflicts between livestock and big game. Only about three percent of the allotment's classified acres are categorized as early seral (<1 percent) or mid seral (~1.5 percent). Similarly, proposed winter

use (12/1 -12/30) of the Cathedral Creek pasture would coincide with big game occupancy however, while livestock tend to congregate in the valley bottoms, big game typically remain slightly higher on the slopes utilizing the mountain shrub communities for forage and cover. Use of the Willow Creek and Burma Road pastures would at times coincide with big game occupation during both the summer and winter months, and while there are likely areas of synchronous use, there is no evidence the proposed grazing system is incompatible with the continued support of big game populations.

Although proposed livestock use of the Tommy's Draw, Willow Creek, Burma Road, Cathedral Creek and Powell 4-A pastures would coincide with part or most of the raptor breeding season, it is not anticipated to directly influence nest success/outcome of woodland raptors. Livestock use in general tends to be concentrated in open, gentler terrain with only incidental use in steeper, wooded areas. Aspen woodlands likely receive heavier use by livestock but this should not directly disrupt nesting activities. Reductions in understory height and density in addition to litter amount would be expected to some degree. This could lead to reductions in avian and small mammal prey populations at a local scale; however it would likely have little measureable influence on nest densities and overall nestling success of woodland raptors.

As mentioned above, reductions in herbaceous height, density and residual component, particularly in livestock concentration areas may suppress small mammal populations on a localized scale. However, these areas do not appear to be widespread, (~3 percent of the allotment early or mid seral state) and it is suspected that the proposed grazing system is compatible with continued maintenance of small mammal and nongame bird populations.

Environmental Consequences of the No Action Alternative: The most noticeable response would be for non-game mammals and bird populations, who would benefit with increasing vegetative cover, forage and litter cover. However, based on vegetative conditions throughout the allotment, herbaceous cover appears satisfactory and it is suspected that small mammal and bird populations are currently near potential across much of the allotment. Increases would be most prominent in those areas favored by livestock (bottomlands, mildly-sloped terrain and areas in close proximity to water) that are grazed synchronous with the nesting season. Rosenstock (1996) showed a positive response (abundance and species richness) for most small mammal species on ungrazed vs. grazed sites (>100 ha) in south-central Utah.

Mitigation: None

Finding on the Public Land Health Standard for plant and animal communities (partial, see also Vegetation and Wildlife, Aquatic): Overall, the allotment generally meets the Land Health Standard for terrestrial wildlife at the landscape level. Based on rangeland assessments < 1 percent of grazable public lands are considered to be in an early seral state, dominated by invasive, annuals. These communities likely detract to a certain extent from habitat character and/or function, particularly for migratory birds and small mammals. The Proposed and No action alternatives would not be expected to yield major improvements in these early seral communities. The proposed grazing schedule would not impede continued maintenance of these standards. There is no evidence to suggest that current grazing practices are aggravating deficiencies in the utility or available extent of terrestrial wildlife habitat.

WILD HORSES

Affected Environment: Wild horses on public lands are protected under the Wild Free Roaming Horses and Burros Act of 1971 and are managed by the BLM, WRFO. WRFO's RMP/ROD (BLM 1997) includes an implementation plan for wild horse management. The BLM manages wild horses to provide a healthy, viable breeding population with a diverse age structure.

WRFO's Piceance-East Douglas Herd Management Area (HMA) consists of approximately 190,000 acres. Portions of the Cathedral Bluffs allotment (Hogan and Tommy's Draw pastures) are included within the East Douglas portion of the HMA. Approximately 2,001 BLM and 8 private acres are in Hogan Draw and 1,729 BLM and 334 private acres are in Tommy's Draw pastures, this would account for roughly two (2) percent of the HMA. There is no physical barrier such as a fence in the drainage of Philadelphia Creek which is the dividing line between the Hogan and Tommy's Draw pastures; therefore there is nothing from preventing the wild horses from utilizing the entire landscape in either pasture. The current configuration of the HMA provides for high summer range on the Cathedral Bluffs, surrounded by adjacent fall-winter-spring ranges in both the Piceance and Douglas Creek Basins.

The HMA is especially valuable because of the habitat diversity it contains. Vegetation within the HMA consists of pinyon-juniper woodlands interspersed with sagebrush and greasewood. Wild horses rely on these woodlands during the summer months for shade and protection of newborn foals from predation and during the winter months for cover during severe winter storms. Over 90 percent of wild horse diet is comprised of grasses with shrubs becoming more important during periods of heavy snowfall when horses can less readily paw through snow cover to the grass below. Water intake is supplied by springs, man-made water developments, stock ponds, and perennial streams, as well as, areas of pooled water from rain and snow runoff.

The population of the Piceance-East Douglas herd in this portion of the HMA, prior to the foal crop in 2010 was inventoried at 38 adult individuals (February/March 2010 census). The census summary is as follows: No wild horses were counted in the Hogan Draw pasture, nine (9) wild horses were counted in the Tommy's Draw pasture, and 29 wild horses were counted outside of the HMA boundary or just south and east of the boundary. At this location there is no physical barrier such as a fence nor is there a topographic barrier that precludes the wild horses from regularly crossing from inside the HMA to outside of the HMA. This area includes private pastures in the bottoms that the wild horses regularly occupy throughout the year, with several requests from the land owner to get the wild horses off of the private and back into the HMA. It would facilitate both the land owner, as well as, the BLM if a fence were constructed on portions of Rio Blanco County Road #128 until the road intersects with BLM Road #1194 where fence construction would resume to the north and east until it ties in with the rim of the Cathedral Bluffs. As long as this fence line is maintained in a functioning condition this could prevent most if not all wild horses from exiting the HMA.

The long-term management range for this portion of the HMA is 30 wild horses. The herd's annual production rate is approximately 20 percent. The wild horse population is controlled through round-ups and adoptions of surplus animals. This area was last gathered in 2011 when 12 wild horses gathered and removed which left an estimated population of 43 wild horses. The WRFO recently completed a gather operation inside of the HMA in September 2011. Gather operations will be necessary in the future to maintain the population of around the 30 wild horses in this portion of the HMA and to gather wild horses that have relocated outside of the HMA.

Wild horse viewing is a popular form of non-consumptive recreation; however, due to the terrain, wariness of the wild horses as well as private property access limitations, in this portion of the HMA, the wild horses for this area are seldom viewed by the public.

Environmental Consequences of the Proposed Action: Portions of the proposed permit renewal are located in the HMA. More specifically, the Hogan and Tommy's Draw pastures of the Cathedral Bluffs allotment or generally the East Douglas portion of the HMA. The current cattle operation has co-existed with the wild horses in this area for decades; however, the wild horses from this portion of the HMA are regularly being discovered outside of the HMA boundary. This co-existence can only continue until wild horse numbers exceed the AUMs that have been allocated to wild horse use at which time and by the appropriate policies and procedures BLM would need to gather and remove those excess wild horses from this portion of the HMA.

Various individuals have reported to the WRFO issues between their private lands and domestic livestock pastured adjacent to or within the HMA. Regarding the cattle use, the wild horses in these areas experience nearly a 50/50 year in that the permitted cattle utilization is done for approximately half the year in the spring and the winter months. The spring and winter grazing use of these pastures is made by wild horses along with cattle grazing. The summer and fall grazing use of these pastures is made exclusively by the wild horses. The current utilization by the ungulates in these pastures will need to be continually regulated by cattle use numbers and dates, wild horse numbers, and perhaps big game numbers.

Environmental Consequences of the No Action Alternative: There would be no impacts to the wild horse herd with a No Action Alternative.

Mitigation: None.

CULTURAL RESOURCES

Affected Environment: Grazing permit renewals are undertakings under Section 106 of the National Historic Preservation Act. Range improvements associated with the allotment (e.g., fences, spring improvements) are subject to compliance requirements under Section 106 and will undergo separate standard cultural resources inventory and evaluation procedures. During Section 106 review, a cultural resource assessment (#10-055) was completed for the Cathedral Bluffs allotment (06349) by Kristin Bowen, White River Field Office Archaeologist. The assessment followed the procedures and guidance outlined in the 1980 National Programmatic

Agreement Regarding the Livestock Grazing and Range Improvement Program, IM-WO-99-039, IM-CO-99-007, IM-CO-99-019, and IM-CO-01-026. The results of the assessment are below. Copies of the cultural resource assessments are in the WRFO archaeology and allotment files.

Table 15:

%age of Allotment Inventoried	Number of Sites Present	Further Inventory Required (yes/no)	High Potential of Historic Properties (yes/no)
2.35%	155	Yes	Yes

BLM GIS Data shows 2510 acres have been surveyed in the allotment, which is only 2.35 percent of the allotment. This is an approximate and does not necessarily represent Class III surveys that were done to current standards. Previous inventories have recorded one historic district (45 percent of the Canyon Pintado Historic District lies in the boundary of the Cathedral Bluffs Allotment), 154 archaeological sites, and 49 isolated finds. Based on available data, a very high potential for historic properties occurs in the Cathedral Bluffs Allotment. Archaeological sites in the allotment are primarily prehistoric, and there is a higher percentage of fragile site types than is typical of any random area in northwest Colorado. Recorded sites consist of historic rock art, trash dumps, a loading chute, bridges, a corral, a homestead, sheep camps, and habitations, and prehistoric rock art, open lithics, open and sheltered camps, and open and sheltered architectural sites. 62 of the sites (40 percent) have a rock art component, 10 sites have prehistoric open architectural components, and 10 sites have prehistoric sheltered architectural components, which are not common percentages throughout the field office area.

During the 2000 grazing permit renewal for allotment 06349 the WRFO Archaeologist identified that all the sites in the allotment that were eligible to the National Register of Historic Places, needed to be monitored for grazing impacts. That list of sites, with changes made based on more accurate GIS data, totals 101 sites. Currently, 54 sites have been monitored for this purpose and had grazing impacts assessed. The results of the monitoring are below:

- 37 sites show no signs of impacts from grazing.
- 8 sites show grazing impacts to the ground surface but not to any features of the site, monitoring is recommended (5RB278, 5RB336, 5RB455, 5RB665, 5RB666, 5RB706, 5RB712, 5RB734).
- 7 sites are being impacted from grazing and need to be monitored again and mitigation measures development and implemented as necessary (5RB83, 5RB86, 5RB334, 5RB335, 5RB749, 5RB851, 5RB2717).
- 2 sites (5RB85 and 5RB3151) are being impacted and must be dealt with immediately. Each site has rock art panels that are at cattle height and have extensive livestock disturbance to the ground surface at the panel locations.

Site 5RB85 is within the East Fourmile Recreation Area which is a loop trail with several stops with interpretive panels at rock art sites. The decision to fence this area and have it be a livestock exclusion area was made by the WRFO in the CO-017-97-58 Environmental Assessment, and the decision was subsequently supported in the BLM's 1997 Canyon Pintado Interpretive Plan. However, despite this decision and the presence of fencing around the area, monitoring of 5RB85 up through 2011 has shown continual degradation to the site from obvious livestock use. No change to this prior decision is being recommended, rather an enforcement of the prior decision.

Site 5RB3151 was first recorded in 2000, and at that time light livestock impacts were noted to the site, and it was recommended to monitor and possibly fence the site. In 2011, the site was monitored by WRFO seasonal archaeologists and due to the site having a high research potential, and frequent destructive contact with grazing livestock, it was recommended to be fenced immediately.

The results of this monitoring effort show that sites do have the potential, and have been affected, by livestock grazing in this allotment. Continued monitoring should assess whether grazing damage has solely occurred in the past or if it is continuing to occur. Where damage is actively continuing to occur to sites eligible to the National Register, mitigation is required.

The BLM WRFO Range Specialist, on the Cathedral Bluffs Allotment, identified Twenty-nine cattle concentration areas, in 2010. There were no previously recorded sites within 200 meters of any identified cattle concentration area. The BLM, subsequently surveyed twenty-one of the identified areas, and six were not able to be surveyed prior to the end of the 2010 field season. Two areas had been covered by previous survey and were not resurveyed, and two additional areas that had not been identified but were seen to be congregation areas while in the field, were surveyed. A total of 88.34 acres was surveyed, by BLM WRFO Archaeology Technicians in August and September of 2010 (Rowley 2010). No sites were recorded, therefore no sites were identified that need to be mitigated during this survey. The remaining six concentration areas are to be surveyed prior to the renewal of the permit in another ten years. However, fieldwork to this date shows that while in most allotments, areas near water sources are the main concern for finding impacted archaeological sites, in the Cathedral Bluffs allotment the main concern is the high percentage of rock art sites on cliff faces where cattle naturally take refuge from the sun.

If historic properties are located during any subsequent field inventories in this area, and BLM determines that grazing activities will adversely affect the properties, mitigation will be identified and implemented in consultation with the Colorado State Historic Preservation Officer (SHPO).

Environmental Consequences of the Proposed Action: The direct impacts that occur where livestock concentrate, during normal livestock grazing activity, include trampling, chiseling, and churning of site soils, cultural features, and cultural artifacts, artifact breakage, and impacts from standing, leaning, and rubbing against historic structures, above-ground cultural features, and rock art (Broadhead 2001, Osbourn et al. 1987). Indirect impacts include soil erosion, gullying, and increased potential for unlawful collection and vandalism (Broadhead 2001, Osbourn et al. 1987). Continued livestock use in these concentration areas may cause substantial ground disturbance and cause irreversible adverse effects to historic properties. Continued livestock management is appropriate, as long as identified grazing impacts are properly mitigated.

Environmental Consequences of the No Action Alternative: While a no grazing alternative alleviates potential damage from livestock activities, cultural resources are constantly being subjected to site formation processes or events after creation (Binford 1981, Schiffer 1987). These processes can be both cultural and natural and take place in an instant or over

thousands of years. Cultural processes include any activities directly or indirectly caused by humans. Natural processes include chemical, physical, and biological processes of the natural environment that impinge and or modify cultural materials.

Mitigation: The permittee is responsible for informing all persons who are associated with the allotment operations that they will be subject to prosecution for knowingly disturbing archaeological sites, or for collecting artifacts. If archaeological materials are discovered as a result of operations under this authorization, the permittee must immediately contact the appropriate BLM representative.

Over the next ten years six livestock concentration areas will be surveyed, and sites eligible to the National Register will continue to be monitored. Sites 5RB83, 5RB86, 5RB334, 5RB335, 5RB749, 5RB851, and 5RB2717 will be monitored and if damage is actively continuing to occur, mitigation measures will be developed and implemented.

Site 5RB3151 will be fenced the next field season to exclude livestock.

Fencing of the East Fourmile Recreation Area which includes site 5RB85 will be inspected next field season by WRFO range staff and measures will be taken to insure this area excludes livestock. The grazing permittee and its agents shall not allow livestock to graze within the East Fourmile exclusion area.

PALEONTOLOGY

Affected Environment: Allotment 06349 encompasses areas generally mapped as the following fossil-bearing formations (Tweto 1979): primarily Mesa Verde Group (PFYC 5), and also Green River Formation, Lower part (PFYC 5), Wasatch Formation (PFYC 5), Green River Formation, Parachute Creek Member (PFYC 5), Uintah Formation (PFYC 5), Isles Formation (PFYC 5), Williams Fork Formation (PFYC 5), Sego Sandstone, Buck Tongue of Mancos Shale, and Castlegate Sandstone (PFYC 3), Mancos Shale (PFYC 3), and Modern Alluvium (PFYC 2). The majority of the allotment is in units which the BLM, COSO has classified as PFYC 5 as they have a very high occurrence of containing scientifically significant fossils. PFYC 3 units have a moderate or unknown potential for containing significant fossils, and those classified as PFYC 2 are not likely to contain significant fossils. Nine paleontological sites have been recorded in this allotment. Eight of the recorded sites are in the Mesa Verde, and one is in the Parachute Creek Member of the Green River Formation.

Environmental Consequences of the Proposed Action: In general, paleontological materials (fossils) are not considered to be endangered by normal grazing activities. Direct impacts to fossil materials may occur in areas of livestock concentration (identified during cultural resource investigation—see above). Direct impacts include damage or destruction of fossils, and the disturbance of the stratigraphic context in which they are located. Since in situ fossils are seldom encountered in alluvial areas where cattle tend to concentrate, the potential for damage to undisturbed fossil remains is low. Indirect impacts may include soil erosion, gullying and increased potential for unlawful collection and vandalism. Alteration of grazing patterns by

rotating pastures should have the effect of decreasing any potential damage to existing fossil resources by decreasing the time frame for impacts on any given site.

Environmental Consequences of the No Action Alternative: Direct and indirect impacts to paleontological resources from grazing activities would cease. Exposed fossil materials would still be subject to cultural and natural processes. These include any activities directly or indirectly caused by humans, and chemical, physical, and biological processes of the natural environment.

Mitigation: The permittee is responsible for informing all persons who are associated with the allotment operations that they will be subject to prosecution for disturbing or collecting vertebrate fossils, collecting large amounts of petrified wood (over 25lbs./day, up to 250lbs./year), or collecting fossils for commercial purposes on public lands. If any paleontological resources are discovered as a result of operations under this authorization, the permittee must immediately contact the appropriate BLM representative.

ELEMENTS NOT PRESENT OR NOT AFFECTED:

No flood plains, prime and unique farmlands, exist within the area affected by the Proposed Action. No Native American Religious Concerns are known in the area, and none have been noted by Ute tribal authorities. Should recommended inventories or future consultations with Tribal authorities reveal the existence of such sensitive properties, appropriate mitigation and/or protection measures may be undertaken. There are no environmental justice concerns associated with the Proposed Action.

OTHER ELEMENTS: For the following elements, only those brought forward for analysis will be addressed further.

Other Element	NA or Not Present	Applicable or Present, Not Brought Forward for Analysis	Applicable & Present and Brought Forward for Analysis
Visual Resources	X		
Fire Management	X		
Forest Management		X	
Hydrology/Water Rights			X
Rangeland Management			X
Realty Authorizations		X	
Recreation			X
Access and Transportation			X
Geology and Minerals		X	
Areas of Critical Environmental Concern			X
Wilderness	X		
Wild and Scenic Rivers	X		
Cadastral	X		
Socio-Economics		X	
Law Enforcement	X		

HYDROLOGY AND WATER RIGHTS

Affected Environment: There are currently at least 35 springs that have valid BLM water rights for livestock and wildlife use (See springs table in the Water Quality Section). Beneficial use of waters is limited to a few irrigated hay pastures in the headwaters of East and West Douglas Creek and uses downstream from the confluence of Douglas Creek and the White River.

Environmental Consequences of the Proposed Action: Livestock grazing provides a beneficial use of springs located on BLM administered lands and it is unlikely to result in water uses beyond what the springs can provide.

Environmental Consequences of the No Action Alternative: Wildlife would still be an appropriate beneficial use for springs on BLM administered lands and therefore would maintain water rights for these springs

Mitigation: None Identified

RANGELAND MANAGEMENT

Affected Environment: The Proposed Action occurs within the Cathedral Bluffs Grazing allotment (06349). Nona Powell of Powell 4A ranch is authorized to graze livestock on the Cathedral Bluffs allotment and holds grazing preference through preference transfer. Table 16 below reflects the historic livestock use for the past eleven years on this allotment. This information is generated from Actual Use reports submitted by the permittee at the end of the grazing year.

Table 16:

Historic Livestock Use	
Year	Actual Use (AUMs)
1999	3858
2000	4239
2001	3560
2002	3617
2003	2814
2004	2588
2005	2724
2006	1727
2007	1349
2008	2115
2009	2378
Average Annual Use	2815

Tables 17-24 show the estimated livestock carrying capacity in animal unit months (AUMs) broken down by pasture and by ownership (BLM or private) in the Cathedral Bluffs allotment.

The tables below were developed by analysis of forage production, and acreage breakdown of each ecological site within the individual pastures to determine available forage for livestock consumption (i.e. AUMs). The Tables 17-24 are based on moderate stocking levels that are generally less than stocking rates recommended by the Natural Resources Conservation Service for each specific ecological site.

Table 17:

Bear Canyon					
		Good AUMs	**Fair AUMs**	**Poor AUMs**	**Est. AUMs.**
Tot AUMs (BLM & Pvt.)		4356	2878	1487	1987
% PL		84%	84%	84%	83%
Ac/AUM		2.67	4.04	7.81	5.85
	AUMs	**Acres**	**Ac/AUM**	**% PL**	**% Acres**
BLM	1663	9531.40	5.73	84%	82%
Pvt	324	2087.88	6.44	16%	18%
Total	**1987**	**11619.3**	**8.17**	**100%**	**100%**

Table 18:

Burma Road					
		Good AUMs	**Fair AUMs**	**Poor AUMs**	**Est. AUMs.**
Tot AUMs (BLM & Pvt.)		1758	1183	666	914
% PL		63%	63%	66%	66%
Ac/AUM		5.45	8.09	14.37	10.47
	AUMs	**Acres**	**Ac/AUM**	**% PL**	**% Acres**
BLM	599	6999.91	11.69	66%	73%
Pvt	315	2573.72	8.17	34%	27%
Total	**914**	**9573.6**	**10.47**	**100%**	**100%**

Table 19:

Cathedral Creek					
		Good AUMs	**Fair AUMs**	**Poor AUMs**	**Est. AUMs.**
Tot AUMs (BLM & Pvt.)		1672	1123	603	866
% PL		81%	81%	83%	82%
Ac/AUM		7.47	11.13	20.72	14.43
	AUMs	**Acres**	**Ac/AUM**	**% PL**	**% Acres**
BLM	713	10146.0	14.23	82%	81%
Pvt	153	2350.47	15.36	18%	19%
Total	**866**	**12496.5**	**15.86**	**100%**	**100%**

Table 20:

Hogan					
		Good AUMs	**Fair AUMs**	**Poor AUMs**	**Est. AUMs.**
Tot AUMs (BLM & Pvt.)		3438	2354	1462	2009
% PL		100%	100%	100%	100%
Ac/AUM		9.09	13.28	21.38	15.56
	AUMs	**Acres**	**Ac/AUM**	**% PL**	**% Acres**
BLM	2001	31176.3	15.58	100%	100%
Pvt	8	74.97	9.37	0%	0%
Total	**2009**	**31251.3**	**15.56**	**100%**	**100%**

Table 21:

Powell 4A					
		Good AUMs	**Fair AUMs**	**Poor AUMs**	**Est. AUMs.**
Tot AUMs (BLM & Pvt.)		2277	1500	776	1034
% PL		38%	38%	38%	38%
Ac/AUM		2.27	3.45	6.67	5.01
	AUMs	**Acres**	**Ac/AUM**	**% PL**	**% Acres**
BLM	391	1961.35	5.02	38%	38%
Pvt	643	3218.22	5.01	62%	62%
Total	**1034**	**5179.6**	**5.01**	**100%**	**100%**

Table 22:

Tommys Draw					
		Good AUMs	**Fair AUMs**	**Poor AUMs**	**Est. AUMs.**
Tot AUMs (BLM & Pvt.)		3799	2582	1546	2063
% PL		82%	82%	84%	84%
Ac/AUM		7.45	10.96	18.31	137.20
	AUMs	**Acres**	**Ac/AUM**	**% PL**	**% Acres**
BLM	1729	24670.73	14.27	84%	87%
Pvt	334	3639.80	10.90	16%	13%
Total	**2063**	**28310.5**	**13.72**	**100%**	**100%**

Table 23:

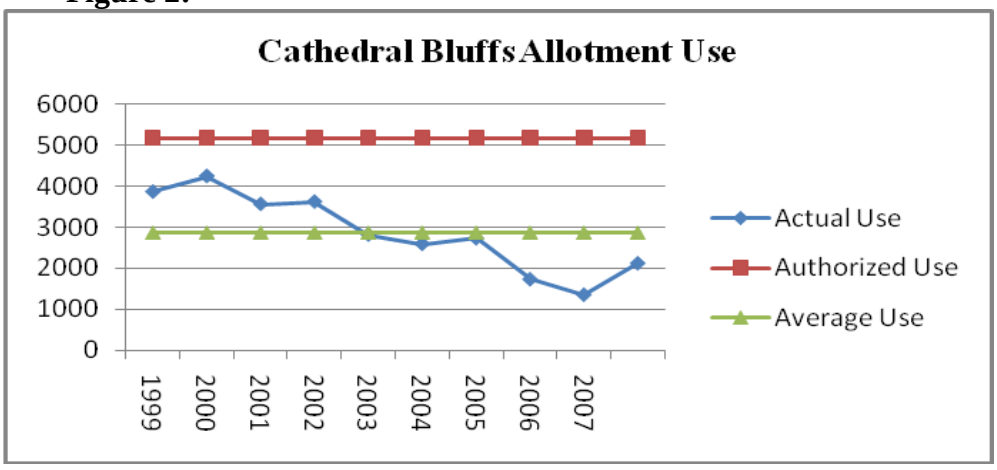
Wardell (private)					
		Good AUMs	**Fair AUMs**	**Poor AUMs**	**Est. AUMs.**
Tot AUMs (BLM & Pvt.)		736	487	249	281
% PL		0%	0%	0%	0%
Ac/AUM		2.91	4.39	8.59	7.61
	AUMs	**Acres**	**Ac/AUM**	**% PL**	**% Acres**
BLM	0	0.00	0.00	0%	0%
Pvt	281	2138.02	7.61	100%	100%
Total	**281**	**2138.0**	**7.61**	**100%**	**100%**

Table 24:

Willow Creek					
		Good AUMs	**Fair AUMs**	**Poor AUMs**	**Est. AUMs.**
Tot AUMs (BLM & Pvt.)		1415	944	507	682
% PL		64%	64%	66%	65%
Ac/AUM		4.25	6.37	11.85	8.81
	AUMs	**Acres**	**Ac/AUM**	**% PL**	**% Acres**
BLM	443	4291.97	9.69	65%	71%
Pvt	239	1716.90	7.18	35%	29%
Total	**682**	**6008.9**	**8.81**	**100%**	**100%**

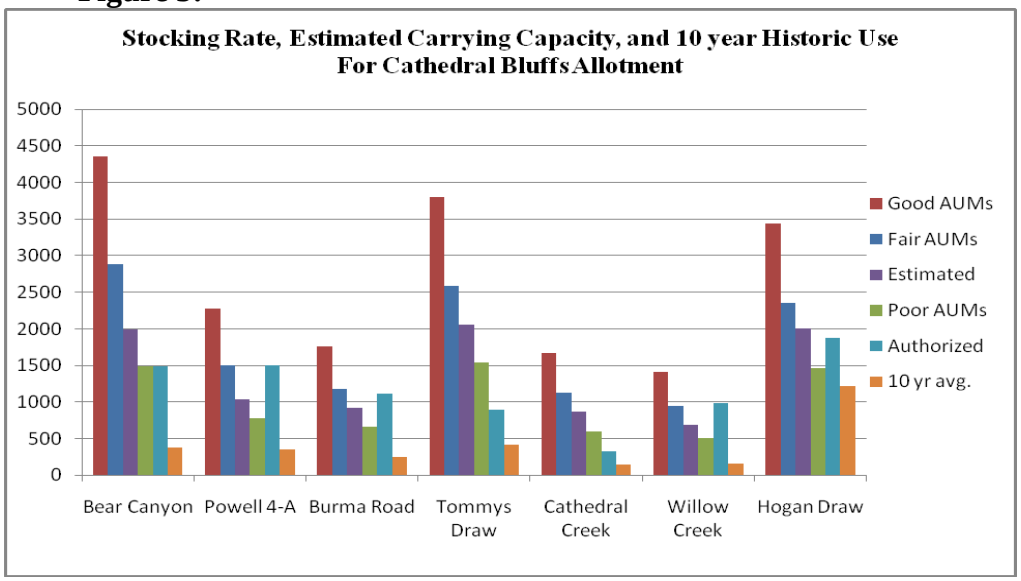
The following graph in Figure 2 presents the AUMs used historically in relation to the permitted AUM numbers and the average AUM numbers for public lands within the Cathedral Bluffs allotment.

Figure 2:



The graph below in Figure 3 represents a breakdown of proposed stocking rate, estimated carrying capacity, and the ten year average livestock use by pasture on BLM and Private Range within the Cathedral Bluffs allotment.

Figure 3:



Environmental Consequences of Alternative A (Proposed Action): The proposed grazing management plan for the Cathedral Bluffs allotment involves an eight pasture annual grazing rotation, and includes one pasture (Wardell) which is entirely private land. The grazing plan also incorporates three strategies to avoid rangeland degradation; these are deferment, low intensity, and short duration. Due to the rotation of livestock from lower elevation pastures in the winter and spring south to higher elevation pastures in the summer and fall, all pastures will receive yearly deferment annually, the Hogan pasture which is used during the winter and early spring receives annual rest during the critical vegetation growing season to avoid rangeland vegetation damage. The Powell 4A and Bear canyon pastures also are deferred annually during the critical growing season. The Tommy's draw pasture which is used annually during the critical growing season as a transition pasture is grazed for a short duration under the proposed grazing schedule,

to allow for adequate regrowth of grazed plants. The Willow Creek, Burma Road and Cathedral Creek pastures which are also used in the spring and fall as transition pastures between summer and winter range, will be grazed at low intensities by spreading the livestock herd within these three pastures which will provide adequate deferment and regrowth opportunity for rangeland vegetation Under the proposed grazing schedule, rangeland production, cover and litter production would be expected to continue to contribute to the health and function of rangeland vegetation, in order to continue to meet standards for rangeland health. Currently existing rangeland improvement projects continue to aid in the proper distribution of livestock within the allotment, and would continue to be maintained or improved under the Proposed Action.

Environmental Consequences of Alternative B (No Grazing Alternative): Under this alternative, the BLM would not authorize livestock grazing on BLM administered lands, within the Cathedral Bluffs allotment. Forage produced on the private lands owned by the permittee account for approximately 23% of the total forage production used on the Cathedral Bluffs allotment. Generally, it would not be economically feasible to fence all private lands separate from BLM administered lands, making use of the privately held forage difficult. Lacking the ability to graze forage produced on BLM administered lands would make it unlikely that W.R. Withers-Powell 4A ranch could sustain a viable livestock operation. Refer to the Vegetation section of this document for more detailed analysis of effects to rangeland vegetation under this alternative.

Mitigation: None

RECREATION

Affected Environment: The primary recreation in the area of the proposed grazing permit renewal is upland big game hunting beginning in late August and finishing in the middle of November. The proposed grazing permit renewal is located within Colorado Parks and Wildlife (CPW) Game Management Unit (GMU) 21. Upland big game hunting in GMU 21 consists of deer, elk, bear and mountain lion. GMU 21 is a trophy unit for buck mule deer.

Environmental Consequences of the Proposed Action: During the big game hunting season the Bear Canyon pasture will be utilized primarily by the permittee for the cattle operations. The Bear Canyon pasture is located within the East Douglas/Soldier Creek ACEC where the eastern portion was designated as non-motorized in December of 1994 to "prevent ongoing, unnecessary and undue degradation of public lands". The hunting in this area requires the public to hike in or travel by horseback from access points public lands in the Douglas Pass area onto Pike Ridge or from Rio Blanco County Road (RBC) 27. Motorized use of this area during the upland big game hunting seasons could be disruptive to remote and scenic hunting experience as well as inadvertently encourage non-authorized motorized use of the area. Establishing periods and limiting authorized routes in which the permitee may utilize motorized access in the East Douglas/Soldier Creek ACEC would reduce the number of contacts with the public hunting contingent and reduce the impacts to the scenic hunting experience.

Environmental Consequences of the No Action Alternative: There would be no grazing or need to travel the roads in the non-motorized area and no impacts to public hunting.

Mitigation: See the mitigation in the Access and Transportation section below.

ACCESS AND TRANSPORTATION

Affected Environment: The primary area of concern is the travel routes in the East Douglas/Soldier Creek ACEC non-motorized section in which the Bear Canyon Pasture is located within. This area is accessed by RBC 27 and a number of unnamed and unnumbered BLM roads.

Environmental Consequences of the Proposed Action: Traveling via motor vehicle in the non-motorized area to manage the cattle operations will encourage the use of motorized equipment in the area. The area was closed to unauthorized motorized use along travel routes to "prevent ongoing, unnecessary and undue degradation of public lands" in 1994. The public must access the area by foot or horseback only. If motorized use of the area is allowed within peak public use, big game hunting season, the potential for conflicts exists and will have to be mitigated. Conflicts may be mitigated by establishing an authorized route during the peak public use and opening the routes between seasons or when there is no hunting.

Environmental Consequences of the No Action Alternative: There would be no impacts to the travel route.

Mitigation: Travel along roads in the non-motorized area will be done between hunting seasons so as to limit the impacts to the public. During hunting seasons, only the road that comes off of the end of RBC 27 heading south located in Township 5 South, Range 101 West, the SW ¼ of the SW ¼ of Section 2 through the NW of Section 11 and from the private land in Sec 11 roads that connect to the privately owned lands in sections 14 and 15 will be allowed for motorized travel. Authorized motorized travel will be for the sole purpose of accessing privately owned lands during the hunting seasons. Non-motorized use, horseback, to conduct cattle operations is encouraged during the time frame of peaked public interest.

CUMULATIVE IMPACTS SUMMARY: The Cathedral Bluffs allotment is located within the Douglas Creek watershed, implementation of the Proposed Action or no action alternatives would not add to the impacts from past, present, and reasonably foreseeable future actions within this area that would cumulatively exceed those discussed in the White River ROD/RMP and/or White River Area Grazing Management Environmental Impact Statement.

REFERENCES CITED:

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Osbourn, Alan, Susan Vetter, Ralph Hartley, Laurie Walsh, Jesslyn Brown
1987 *Impacts of Domestic Livestock Grazing in the Archaeological Resources of Capitol Reef National Park, Utah*. *Occasional Studies in Anthropology No. 20.* Ms. on file, Midwest Archaeological Center, Lincoln, Nebraska.

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Tweto, Ogden
1979 Geologic Map of Colorado. United States Geologic Survey, Department of the Interior, Reston, Virginia.

PERSONS / AGENCIES CONSULTED:

INTERDISCIPLINARY REVIEW:

Name	Title	Area of Responsibility	Date Signed
Bob Lange	Hydrologist	Air Quality, Wastes (Hazardous or Solids), Water Quality (Surface and Ground), and Hydrology and Water Rights.	3/17/2011
Jill Schulte	Botanist	Areas of Critical Environmental Concern, Threatened and Endangered Plant Species	7/06/2010
Kristin Bowen	Archaeologist	Cultural Resources, Paleontological Resources	2/18/2011(updated 1/6/2012)
Tyrell Turner	Rangeland Management Specialist	Invasive, Non-Native Species, Vegetation , Rangeland Management, Wetlands and Riparian Zones, Soils	
Lisa Belmonte	Wildlife Biologist	Migratory Birds, Threatened, Endangered and Sensitive Animal Species, Terrestrial and Aquatic Wildlife	2/12/2011

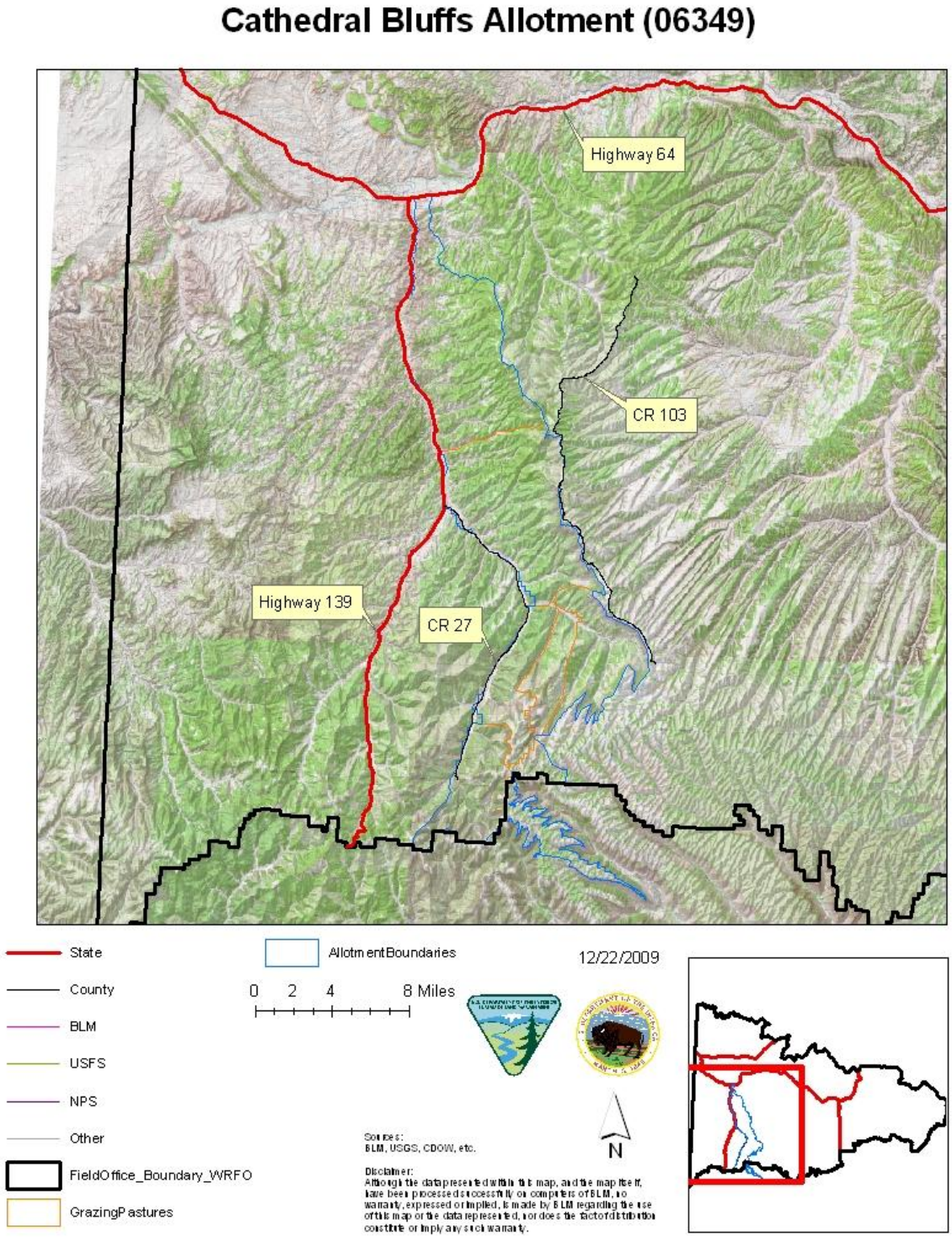
Name	Title	Area of Responsibility	Date Signed
Jim Michels	Outdoor Recreation Planner	Wilderness, Access and Transportation, Recreation,	7/3/2010
Jim Michels	Forester /Fire / Fuels Technician	Fire Management, Forest Management	7/3/2010
Paul Daggett	Mining Engineer	Geology and Minerals	7/09/2010
Stacey Burke	Realty Specialist	Realty Authorizations	12/09/2010
Jim Michels	Natural Resource Specialist / Outdoor Recreation Planner	Visual Resources	7/3/2010
Melissa J. Kindall	Range Technician	Wild Horses	02/23/2011

NAME OF PREPARER: Tyrell Turner

NAME OF ENVIRONMENTAL COORDINATOR:

ATTACHMENTS: Figure 4 Cathedral Bluffs allotment map.

Figure 4:


Cathedral Bluffs Allotment (06349)
Highway 64
CR 103
Highway 139
CR 27
State
County
BLM
USFS
NPS
Other
FieldOffice_Boundary_WRFO
GrazingPastures
AllotmentBoundaries
0 2 4 8 Miles
12/22/2009
N
Sources:
BLM, USGS, CDOW, etc.
Disclaimer:
Although the data represented within this map, and the map itself, have been processed successfully on computers of BLM, no warranty, expressed or implied, is made by BLM regarding the use of this map or the data represented, nor does the factor of distribution constitute or imply any such warranty.

U.S. Department of the Interior
Bureau of Land Management
White River Field Office
220 E Market St
Meeker, CO 81641

Finding of No Significant Impact (FONSI)

DOI-BLM-CO-110-2010-0055-EA

BACKGROUND The Proposed Action is issuance of a grazing permit to Nona Powell, authorizing livestock grazing on the Cathedral Bluffs allotment (06349). The grazing permit would be issued for a ten year period. This grazing schedule from the Proposed Action would be incorporated into the grazing permit and functioning as the Allotment Management Plan.

FINDING OF NO SIGNFICANT IMPACT

Based on the analysis of potential environmental impacts contained in the attached environmental assessment, and considering the significance criteria in 40 CFR 1508.27, I have determined that the Proposed Action will not have a significant effect on the human environment. An environmental impact statement is therefore not required.

Context

The project is a site-specific action directly involving BLM administered public lands that do not in and of itself have international, national, regional, or state-wide importance. The applicant owns the unfenced private property within the boundaries of the Cathedral Bluffs allotment, and is the current grazing preference holder for the allotment.

Intensity

The following discussion is organized around the 10 Significance Criteria described at 40 CFR 1508.27. The following have been considered in evaluating intensity for this Proposed Action:

1. Impacts that may be both beneficial and adverse.

The beneficial effects of the Proposed Action include support of the local livestock industry and increased stewardship of public lands. The authorized livestock operator has mandatory terms and conditions that must be met to maintain their grazing preference. This provides a certain level of stewardship of public lands in that if these lands were to become degraded by any activity or event, natural or human in origin, grazing and or other authorized uses would be terminated. This stewardship role of the livestock operator not only mandates proper livestock and forage management but also provides communication with the BLM as to other activities or events that could cause degradation to public lands. Adverse effects include minor impacts to soils and vegetation that will be limited in scope and are expected to be insignificant.

2. The degree to which the Proposed Action affects public health or safety.

There would be no impact to public health and safety.

3. Unique characteristics of the geographic area such as proximity to historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas.
There are no park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas in the area of Proposed Action. The South Cathedral Bluffs and a portion of the East Douglas/Soldier Creek ACECs occur within the Cathedral Bluffs allotment. These ACECs are known to support biologically diverse plant communities. No known threatened or endangered plant species inhabit the Proposed Action area however; a number of BLM sensitive plant species are prevalent in this area, especially within the South Cathedral Bluffs ACEC. It is unlikely that implementation of the Proposed Action would adversely affect sensitive plants. Also located within the grazing allotment are Canyon Pintado National Historic District which contains a large concentration of cultural resources and Coal Draw ACEC designated for paleontological values.

4. Degree to which the possible effects on the quality of the human environment are likely to be highly controversial.
Livestock grazing has occurred for many years on the Cathedral Bluffs allotment and surrounding areas. The Cathedral Bluffs allotment management plan (AMP) was developed with the objective to improve and/or maintain range conditions within acceptable standards; to provide an optimum amount of forage for livestock, wildlife, and wild horses on a sustained yield basis; and to improve efficiency of grazing management. The AMP also includes emphasis to maintain or improve riparian area condition. Implementation of the Proposed Action is not expected to generate controversy.

5. Degree to which the possible effects on the quality of the human environment are highly uncertain or involve unique or unknown risk.
No highly uncertain or unknown risks to the human environment were identified during analysis of the Proposed Action.

6. Degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration.
The Proposed Action neither establishes a precedent for future BLM actions with significant effects nor represents a decision in principle about a future consideration. Livestock grazing of the proposed allotment has been evaluated since at least the 1981 Grazing Management EIS.

7. Whether the action is related to other actions with individually insignificant but cumulatively significant impacts.
No individually or cumulatively significant impacts were identified for the Proposed Action. Any adverse impacts identified for the Proposed Action, in conjunction with any adverse impacts of other past, present, or reasonably foreseeable future actions will result in negligible impacts to natural and cultural resources.

8. The degree to which the action may adversely affect districts, sites, highways, structures, or objects listed on the National Register of Historic Places or may cause loss or destruction of significant scientific, cultural, or historical resources. Mitigation has been provided to protect cultural resources eligible for listing in the NRHP including those resources located

within the Canyon Pintado National Historic District. Any potential adverse effects have been mitigated.

9. The degree to which the action may adversely affect an endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species Act (ESA) of 1973.
There are no listed or candidate species which inhabit or make substantial use of habitat within the project area. The Proposed Action should not adversely impact any endangered or threatened species.

10. Whether the action threatens a violation of Federal, State, or local law or requirements imposed for the protection of the environment.
Neither the Proposed Action nor impacts associated with it violate any laws or requirements imposed for the protection of the environment.

SIGNATURE OF AUTHORIZED OFFICIAL: Acting Field Manager

DATE SIGNED: 3/8/12

U.S. Department of the Interior
Bureau of Land Management
White River Field Office
220 East Market Street
Meeker, CO 81641

CO-110 (WRFO)
Sec 3. CF (0501452)

Certified Mail No.
Return Receipt Requested

March 8, 2012

Powell 4A Ranch
PO Box 23
Rangely, CO 81648

NOTICE OF PROPOSED DECISION

Dear Ms. Powell:

Bureau of Land Management (BLM) White River Field Office (WRFO) has received your application for renewal of grazing permit 0501542 authorizing grazing within the Cathedral Bluffs allotment. The application has been reviewed for conformance with 43 CFR 4110.1(b)(2)(i), 4110.1(b)(2)(ii), and 4110.1(b)(2)(iii).

The proposed grazing schedule was reviewed and analyzed during the permit issuance process. Land health assessments, field observations, and other information was evaluated and reviewed for this allotment. Information provided by you through consultation was also considered in development of the proposed grazing permit.

To comply with the National Environmental Policy Act of 1969, as amended, this office conducted an Environmental Assessment (EA) for the issuance of a new grazing permit to analyze and determine whether or not significant impacts would result from implementation of the proposed grazing permit. This review has now been completed in an Environmental Assessment which analyzed the proposed grazing programs as developed by BLM and yourself. The EA resulted in a Finding of No Significant Impact. A copy of DOI-BLM-CO-110-2010-0055-EA is on file at the WRFO. The Proposed Action is subject to and has been reviewed for conformance with the following plan (43 CFR 1610.5, BLM 1617.3): White River Record of Decision and Approved Resource Management Plan (ROD/RMP), approved: July 1, 1997, pages 2-10 through 2-14, 2-22 through 2-26.

The EA analyzed two alternatives: The Proposed Action (Alternative A) which is a continuation of current management and a No Grazing Alternative (Alternative B).
The BLM is mandated by regulations to take appropriate action as soon as practicable but not later than the start of the next grazing year upon determining that existing grazing management practices or levels of grazing on public lands are significant factors in failing to achieve the Public Land Health Standards and conform with the Colorado Livestock Grazing Management Guidelines (43 C.F.R. 4180.2(c)).

Below is a brief description of Alternatives A in the environmental assessment. Alternative A is a grazing schedule developed to maintain areas currently meeting land health standards or maintain a trajectory towards meeting land health standards. It involves a rotational grazing system through eight pastures and takes into consideration the deferment requirements of the White River Field Office 1997 Record of Decision/Resource Management Plan (WRFO ROD/RMP) (D-14). Alternative A addresses the number of livestock, season of use, duration, frequency, and intensity of grazing use to minimize impacts to vegetation and rangeland health (Guideline 2). The table below outlines Alternative A:

Proposed Grazing Schedule for Cathedra Bluffs Grazing Permit 0501452						
	Livestock		Grazing Period			
PASTURE	NUMBER	KIND	BEGIN	END	%PL	AUM's
Hogan Draw	550	Cattle	3/1	3/31	100%	561
Tommy's Draw	550	Cattle	4/1	4/30	93%	504
Tommy's Draw	50	Cattle	5/1	5/31	93%	47
Willow Creek	350	Cattle	5/1	5/31	45%	161
Willow Creek	200	Cattle	6/1	6/15	45%	44
Cathedral Creek	150	Cattle	5/1	6/15	82%	186
Burma Road	100	Cattle	5/1	5/31	56%	57
Burma Road	200	Cattle	6/1	6/15	56%	55
Burma Road	550	Cattle	6/16	6/30	56%	152
Powell 4-A	550	Cattle	7/1	8/30	35%	386
Powell 4-A	400	Cattle	9/1	9/30	35%	138
Bear Canyon	150	Cattle	9/1	9/30	41%	61
Burma Road	200	Cattle	10/1	10/30	56%	110
Bear Canyon	350	Cattle	10/1	10/30	41%	146
Burma Road	100	Cattle	11/1	11/15	56%	28
Bear Canyon	400	Cattle	11/1	11/15	41%	81
Cathedral Creek	50	Cattle	11/1	11/30	82%	40
Tommy's Draw	100	Cattle	11/15	11/30	93%	49
Willow Creek	250	Cattle	11/15	11/30	45%	59
Hogan Draw	250	Cattle	12/1	12/30	100%	247
Tommy's Draw	250	Cattle	12/1	12/30	93%	229
Cathedral Creek	50	Cattle	12/1	12/30	82%	40
Hogan Draw	550	Cattle	1/1	2/28	100%	1067
Willow Creek	200	Yearling Cattle	6/1	6/30	45%	89
Burma Road	200	Yearling Cattle	6/1	6/30	56%	110

Bear Canyon	400	Yearling Cattle	9/1	10/31	41%	329
Willow Creek	200	Yearling Cattle	11/1	11/30	45%	89
Burma Road	200	Yearling Cattle	11/1	11/30	56%	110
					Total	5175

The Wardell pasture which is entirely private land is not included in the table above, but was considered in the analysis of grazing management within the Cathedral Bluffs allotment.

PROPOSED DECISION

In conformance with 43 CFR 4160.1, my proposed decision is to implement the Proposed Action (Alternative A), as mitigated in EA number DOI-BLM-CO-110-2010-0055-EA for authorization of livestock grazing use on the Cathedral Bluffs allotment for a period of 10 years expiring on February 28, 2022 as supported by 43 CFR 4130.2(d)(3)].

Grazing Permit Terms and Conditions: The following terms and conditions as required by 43 CFR 4130.3 would be included in the grazing permit issued under this alternative:

1. It is unlawful for the permittee, agents or employees to knowingly disturb or collect cultural, historical or paleontological materials on public lands. If cultural, historical or paleontological materials are found, including human remains, funerary items or objects of cultural patrimony, the permittee is to stop activities that might disturb such materials, and notify the authorized officer immediately.

2. The permittee or lessee must provide reasonable administrative access across private and leased lands to the BLM for the orderly management and protection of the public lands, as outlined in 43 CFR 4130.3-2(h).

3. Grazing permit or lease terms and conditions and the fees charged for grazing use are established in accordance with the provisions of the grazing regulations now or here after approved by the Secretary of the Interior.

4. They are subject to cancellation, in whole or in part, at any time because of:
    a. Noncompliance by the permittee/lessee with rules and regulations.
    b. Loss of control by the permittee/lessee of all or a part of the property upon which it is based.
    c. A transfer of gazing preference by the permittee/lessee to another party.
    d. A decrease in the lands administered by the Bureau of Land management within the allotment(s) described.
    e. Repeated willful unauthorized grazing use.

5. They are subject to the terms and conditions of allotment management plans if such plans have been prepared. Allotment management plans MUST be incorporated in permits or leases when completed.

6. The permittee shall submit an Actual Use form within 15 days after completing their annual grazing use as outlined in 43 CFR 4130.3-2(d).

7. Livestock use will occur as outlined in the Grazing Schedule in the Proposed Action portion of the Environmental Assessment document CO-110-2010-0055-EA that analyzes grazing on the Cathedral Bluffs allotment in accordance with 43 CFR 4120.2(d).

8. Those holding permits or leases MUST own or control and be responsible for the management of livestock authorized to graze.

9. The authorized officer may require counting and/or additional or special marking or tagging of the livestock authorized to graze.

10. In order to improve livestock distribution on the public lands, no salt blocks and/or mineral supplements will be placed within a 1/4 mile of any riparian area, wet meadow, or watering facility (either permanent or temporary) unless stipulated though a written agreement or decision in accordance with 43 CFR 4130.3-2(c).

11. The permittee's/lessee's grazing case file is available for public inspection as required by the Freedom of Information Act.

12. Grazing permits or leases are subject to the nondiscrimination clauses set forth in the Executive Order 11246 of September 24, 1964, as amended. A copy of this order may be obtained from the authorized officer.

13. Livestock grazing use that is different from that authorized by a permit or lease MUST be applied for prior to the grazing period and MUST be filed with and approved by the authorized officer before grazing use can be made.

14. Billing notices are issued which specify fees due. Billing notices, when paid, become a part of the grazing permit or lease. Grazing use cannot be authorized during any period of delinquency in the payment of amounts due, including settlement for unauthorized use.

15. Grazing fee payments are due on the date specified on the billing notice and MUST be paid in full within 15 days of the due date, except as otherwise provided in the grazing permit or lease. If payment is not made within that time frame, a late fee (the greater of $25 or 10 percent of the amount owed but not more than $250 will be assessed.

16. No Member of, or Delegated to, Congress or Resident Commissioner, after his/her election of appointment, either before or after he/she has qualified, and during his/her continuance in office, and no officer, agent, or employee of the Department of the Interior, other than members of Advisory committees appointed in accordance with the Federal Advisory Committee Act (5 U.S.C. App.1) and Sections 309 of the Federal Land Policy and Management Act of 1976 (43 U.S.C. 1701 et seq.) shall be admitted to any share or part in a permit or lease, or derive any benefit to arise therefrom; and the provision of Section 3741 Revised Statute (41 U.S.C 22), 18 U.S.C. Sections 431-433,

and 43 CFR Part 7, enter into and form a part of a grazing permit or lease, so far as the same may be applicable.

17. Fencing of the East Fourmile Recreation Area site will be inspected next field season by WRFO range staff and measures will be taken to insure this area excludes livestock. The grazing permittee and its agents shall not allow livestock to graze within the East Fourmile exclusion area.

18. Travel along roads in the nonmotorized area will be done between hunting seasons so as to limit the impacts to the public. During hunting seasons, only the road that comes off of the end of RBC 27 heading south located in Township 5 South, Range 101 West, the SW ¼ of the SW ¼ of Section 2 through the NW of Section 11 and from the private land in Sec 11 roads that connect to the privately owned lands in sections 14 and 15 will be allowed for motorized travel. Authorized motorized travel will be for the sole purpose of accessing privately owned lands during the hunting seasons. Nonmotorized use, horseback, to conduct cattle operations is encouraged during the time frame of peaked public interest.

This proposed decision is being issued to you as an affected party under authority of 43 CFR 4160.1, and as qualified applicants under 4130.2(a) and (e). The Proposed Action is subject to and has been reviewed for conformance with the following plan (43 CFR 1610.5, BLM 1617.3); White River Record of Decision and Approved Resource Management Plan (ROD/RMP), approved: July 1, 1997, pages 2-10 through 2-14, 2-22 through 2-26.

RIGHT OF PROTEST AND/OR APPEAL

Any applicant, permittee, lessee or other interested publics may protest a proposed decision under Sec. 43 CFR 4160.1 and 4160.2, in person or in writing to Kent Walter, Field Manager White River Field Office, 220 E. Market Street, Meeker, CO 81641 within 15 days after receipt of such decision. The protest, if filed, should clearly and concisely state the reason(s) why the *proposed decision* is in error.

In accordance with 43 CFR 4160.3 (a), in the absence of a protest, the proposed decision will become the final decision of the authorized officer without further notice unless otherwise provided in the proposed decision.

In accordance with 43 CFR 4160.3 (b) upon a timely filing of a protest, after a review of protests received and other information pertinent to the case, the authorized officer shall issue a final decision.

Any applicant, permittee, lessee or other person whose interest is adversely affected by the final decision may file an appeal *(in writing)* in accordance with 43 CFR 4.470 and 43 CFR 4160.4. The appeal must be filed within 30 days following receipt of the final decision or within 30 days after the date the proposed decision becomes final. The appeal may be accompanied by a petition for a stay of the decision in accordance with 43 CFR 4.471 pending final determination on appeal. The appeal and petition for a stay must be filed in the office of the authorized officer,

as noted above. The person/party must also serve a copy of the appeal on the Office of the Solicitor, Rocky Mountain Region, Denver Field Office, U.S. Department of the Interior, 755 Parfet Street, Room 151, Lakewood, CO 80215.

The appeal shall state the reasons, clearly and concisely, why the appellant thinks the final decision is in error and otherwise complies with the provisions of 43 CFR 4.470.

Should you wish to file a petition for a stay, see 43 CFR 4.471 (a) and (b). In accordance with 43 CFR 4.471(c), a petition for a stay must show sufficient justification based on the following standards:

(1) The relative harm to the parties if the stay is granted or denied.
(2) The likelihood of the appellant's success on the merits.
(3) The likelihood of immediate and irreparable harm if the stay is not granted, and
(4) Whether the public interest favors granting the stay.

As noted above, the petition for stay must be filed in the office of the authorized officer and served in accordance with 43 CFR 4.471.

Any person named in the decision who receives a copy of a petition for a stay and/or an appeal, see 43 CFR 4.472(b) for procedures to follow if you wish to respond

If you have any questions, contact Tyrell Turner at (970) 878-3859.

Sincerely,

/s/ Kent E. Walter
Field Manager